DOCUMENT RESUME

ED 071 190 EA 004 790

TITLE	A Foundation Goes to School. The Ford Foundation Comprehensive School Improvement Program, 1960-1970.
INSTITUTION	Ford Foundation, New York, N.Y.
PUB DATE	Nov 72
NOTE	51p.; One of a series of reports on activities supported by the Ford Foundation
AVAILABLE FROM	Ford Foundation, Office of Reports, 320 East 43rd Street, New York, New York 10017
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Comprehensive Programs; *Educational Change; Educational Experiments; *Educational Innovation; Educational Needs; *Educational Programs; *Foundation Programs; Program Design; Program Effectiveness; *Program Evaluation
IDENTIFIERS	Comprehensive School Improvement Program; CSIP; *Ford Foundation

ABSTRACT

This report provides a critical analysis of the Foundation's program, examining its rationale, implementation, and impact. The Foundation gave access to all correspondence and progress reports relating to the program to an independent evaluation team and facilitated visits to most of the 25 project sites. The first chapter discusses the entry of the Foundation into educational activities and traces the development of those activities through the decade of educational experiments in the 1950's and into the CSIP of the 1960s. Diagrams illustrate breakdowns of the $31 million funding of the program by geographic region, race and culture, community population, and type of grantee. The second chapter concentrates on CSIP's role in teacher development and changing educational practices. The implications behind the experiments in organization and administration are discussed in the third chapter. The final chapter discusses the implications of and the lessons to be drawn from CSIP efforts. A list of projects by state and the amount of grant for each and a list of publications resulting from the CSIP project are included at the end of the publication. (Page 13, a figure showing funding by amounts and sequence, may reproduce poorly.)
(Author/DN)

ED 071190

a foundation goes to school

THE FORD FOUNDATION
COMPREHENSIVE SCHOOL
IMPROVEMENT PROGRAM
1960-1970

EA 004 790

3 **Foreword**

5 **Preface**

7 **I. Origins and Design**
7 Background
8 A Program for the 1960s
11 A Change in Direction
11 Action Projects vs. Research
12 Funding

18 **II. Educational Objectives**
18 Professional Development and Classroom Practices
24 Emphasis on Teacher Development
25 Summary

26 **III. Change Strategies: Lessons for Funding Sources**
27 Innovations: Implementation and Maintenance

40 **IV. Implications**

44 **Projects by State**

47 **Bibliography**

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

One of a series of reports on activities supported by the Ford Foundation. A complete list of Foundation publications may be obtained from the Ford Foundation, Office of Reports, 320 East 43rd Street, New York, New York 10017.

Library of Congress Catalog Card
Number 72-91853 November 1972

Design consultant: Courtland White

foreword

This report traces and analyzes the results of a major Ford Foundation effort through the 1960s to improve public education. The effort, called the Comprehensive School Improvement Program, was aimed at legitimizing the concept of innovation in public school programs and at testing various kinds of innovation.

The 1960s were a decade of innovation for schools. Spurred by foundations and later by federal and state governments, public school systems embraced a host of new programs and projects in curriculum, staffing, scheduling, technology, and training. By and large, there was widespread agreement that our system of public education needed changing (though not too much) and that changes could be brought about by the formal leaders of the system, principally school boards and school administrators, with the help of teachers and, to some degree, colleges and universities. The nation still had enormous faith in its schools and their ability to change without much outside pressure. Those were not days of decentralization, student rights, teacher militancy, full state funding, free schools outside the public system, busing for purposes of integration, and the other commanding issues that face us in the 1970s. Nor had we yet come to understand the significance of our involvement in Vietnam and its effects on youth in schools. In fact, 1960 was a time when nearly everyone thought that with more money, more buildings, and more teachers, our nation's schools could, indeed, make a few adjustments and changes to produce a better society.

In this climate the Ford Foundation began the Comprehensive School Improvement Program. Over its course, more than $30 million was granted to some twenty-five projects. Each project differed from the others in significant ways, but all were related through common strategies, including close working relations with colleges and universities and orchestration of activities in curriculum, use of time, staff, technology, and facilities to create a more comprehensive approach to improving educational programs. In research terms the program broke little fresh ground. It was not intended to invent further innovations; rather the program focused on ways and means to make school systems adaptable, flexible, and open to change so that they could make good use of innovative schemes that had already been developed.

Whether or not these strategies were correct or the goals were accomplished is the substance of this report. Since the Foundation believes that neither it nor the projects should be the sole judge of the record, an independent assessment was commissioned. Paul Nachtigal, a perceptive educator from Colorado, designed the plan and recruited a team of sensitive and experienced associates to join him in carrying out the review. This report is Mr. Nachtigal's; his study associates may not be in unanimous agreement with the exact tone or exact word of the document, but it has their approval. On behalf of the Foundation, I offer our thanks to him, to William Greenbaum of the *Harvard Educational Review*, who helped prepare the final draft, and to the members of the study team, Michael Annison, Dr. Earl R. Burrows, Francis Parkman, Dr. William Rapp, Fr. Patrick Rice, and Roberta J. Warren. Dr. Percy D. Peckham also prepared a critique of the research reports which the team obtained from the projects.

The study could not have been made without the generous assistance given by project directors, administrators, officials, teachers, and, in some cases, parents and pupils in school systems, and other institutions and agencies that were a part of the program. They allowed the team free and open access to the projects and to their own experiences and views. I should add my thanks as well to the several Foundation staff, past and present, who also worked to assure the team free access to Foundation records.

Readers may question why the report does not discuss pupils more extensively. The fact is, the

program was oriented to teachers and to schools and groups of pupils rather than to individuals. Individual projects did of course deal with individual pupils; nonetheless, it is fair to say that the program reflected the times (the early 1960s) and did not address itself directly to the emotional and attitudinal development of pupils—that set of human relations factors sometimes termed the "affective domain." Most of those who worry and study about education were barely aware of that realm as we were spinning out of the 1950s, the decade of the "pursuit of excellence." If there is fault by this omission, it lies with those of us responsible for the early conception of the program rather than with project directors and staffs.

Finally, this report represents a kind of self evaluation for the Foundation as well as for public education. We urged candor on the evaluation team, and we applied to their report neither whitewash nor the afterthoughts of the well meaning who try and fall short of the goals. We offer it to the public to fulfill what we regard as a responsibility—to report what we did and how it all came out in the end (both the pleasures and the pain). We hope that it will provide insights to school experimentation for those public and private officials, professionals and laymen, who are engaged in the terribly tough business of trying to improve education.

EDWARD J. MEADE, JR.
Program Officer in Charge
Public Education
Ford Foundation

preface

This report provides a critical analysis of the Ford Foundation's Comprehensive School Improvement Program (CSIP) of the 1960s, examining its rationale, its implementation, and its impact. The Foundation gave an independent evaluation team access to all correspondence and progress reports relating to the program and facilitated visits to most of the project sites.* Thus the primary sources of information include: internal Foundation documents providing evidence of the thoughts and decisions that went into the formative stages of the program; project proposals and grant requests of the twenty-five projects that comprised the program; site visits to twenty-three projects by two-member visiting teams, each spending approximately one week per project; and annual and final project reports submitted by each of the projects to the Foundation.

The findings and conclusions of this document may appear to be overly critical, especially to those project directors and Foundation personnel who had heavy investments of time and professional status in the projects. In general, the observations of the visiting site teams differed sharply from the positive statements of progress presented in project reports to the Foundation. Much of this discrepancy can be attributed to the fact that the observations were made as long as four years after the project reports were written—a passage of time that was essential to gain a sense of the longer-term impacts of the projects. In many instances, innovations that had been implemented were no longer in use at those particular sites, even though in some cases similar innovations had since been adopted by other school systems.

The fact that outsiders were asked to analyze the strengths and weaknesses of CSIP, including the Foundation's own shortcomings with relation to the program, demonstrates, I believe, the Foundation's heightened awareness of the complexities of change and the interrelation of education and large social issues. It bespeaks, too, an increasing sense of perspective about the limitations of the role that foundations and other change agents can play, along with the responsibility to continue working with a broad range of individuals, groups, and institutions on major dilemmas facing American society.

PAUL NACHTIGAL

*Time did not permit a visit to the Puerto Rico project. Atlanta was not visited because of a recent project restructuring and change in direction.

I. origins and design

BACKGROUND

Preparatory to broadening the scope of its philanthropic activities to the national level, the Foundation's trustees in 1947 appointed a committee to prepare overall policy recommendations. In 1949, the committee submitted its findings in a report entitled *Study for the Ford Foundation on Policy and Program*. Five major program areas were delineated, including "Education in a Democratic Society."

This segment of the report contained a sharp and extended criticism of formal education, emphasizing the failure to provide equal opportunity for minority groups and the poor. Because the report has had direct or indirect influences on the Foundation's educational activities of the past two decades, it is worth recalling some of its passages:

It is impossible to conceive a true democracy with restricted opportunities for education or with educational institutions which are not geared to the needs and goals of society as a whole. . . .

The Committee has received from its advisers evidence of an unusual degree of dissatisfaction with educational institutions and influences which now operate in our society. . . .

In considering the functions of formal education, the Committee recognized that democratic objectives require three things of our educational system: first, that it apply in action the principle of equality of opportunity; second, that it train citizens and leaders in coping with society's problems; and, third, that it assist all men to employ their native capacities not only to make a living but to carry on satisfying and purposeful lives. In all three respects our educational system is thought to exhibit serious deficiencies.

In practice, education should accord equal opportunity to all. This is not only a fundamental democratic principle; it is a prerequisite to the social mobility and fluidity which are basic to democracy. Without equal educational opportunity, equality of economic opportunity cannot exist. . . .

Prejudice and discrimination abridge the educational opportunities of the members of our minority groups. Persons of all races and colors do not have equal access to education. The advantages of education are also walled off behind economic barriers, which are even more prevalent though perhaps less well publicized. . . .

Perhaps the greatest single shortcoming of our school system is its tendency to concern itself almost exclusively with the dissemination of information. Schools should be the most important influence outside of the home for the molding of whole persons. The function of the school is the broad training of mind and intellect. Yet individual purpose, character, and values, the bases of which are laid in the home, are often inadequately developed by the institutions which could, by precept and deeper teaching, assume a major share in supporting them most successfully. To concentrate on the absorption of information seems unrealistic when one realizes that students retain only a small portion of such information. Education must meet the needs of the human spirit.

. . . We must bring about a satisfactory relationship between general and special knowledge. . . . This means more than graduating adequate numbers of specialists and generalists; it will require the development in both of an understanding of their relations one to the other and of the relations of both to society.

Even in general or liberal education the tendency is to break the curriculum into fragments and to overspecialize in teaching. There is an excessive emphasis on scholasticism as an end in itself, and a notable failure to keep abreast of both social development and social needs. . . .

Our educational system faces numerous other problems, such as the great shortage and often poor quality of teaching personnel at the primary and secondary levels; the pressure of enrollment upon physical plant during the growth of the postwar school population; the apathy of parents and other citizen groups toward school requirements; the difficulties of obtaining adequate financing, particularly in regions of low economic potential; and the slowness with which schools adopt new procedures and aids for teaching. Many of these problems would remain substantial even if mitigated by federal aid or by other sources of financial assistance. While to maintain our historical democracy in school affairs we must retain a high level of local autonomy in education, it is at the same time necessary to overcome the deficiencies inherent in such a wide scattering of policy planning and administrative functions. How to attain coordination of the many local school systems, how to provide the planning and guidance for continuity of progress, and how to achieve a basic unity of purpose among them—

these are problems of extreme difficulty. How to solve these problems in the interest of society as a whole, and how to do so without at the same time undermining freedom of education itself, constitutes a problem of a still higher order in the application of democratic principles.

In response to the committee's analysis, the Foundation in 1951 created the specialized "Fund for the Advancement of Education" to encourage useful changes within education. Confining itself largely to single-purpose, short-term pilot projects during its first decade, the Fund made some 500 grants totaling approximately $50 million. The range and variety of these programs are described in *Decade of Experiment: The Fund for the Advancement of Education, 1951-1961*. The Fund focused major attention on the recruitment and training programs for liberal arts graduates and teacher fellowships for advanced study ($23.5 million). It encouraged better use of teacher time and talents in programs to prepare and use teacher aides, to develop patterns for team teaching, and to increase use of technological machines such as TV, tape, teaching machines ($16.6 million). Programs for equalization of opportunity supported experiments in depressed areas such as the Virgin Islands and the Kentucky mountains, and pilot projects in Negro schools and colleges ($2.1 million). Projects introduced modern business methods into education with management, teacher-salary, and cost surveys ($1.6 million).

The final section of *Decade of Experiment* looked to the 1960s and posed seven "urgent questions":

1) Can the function of schools be clarified? (We can determine educational goals only after we have answered the larger question of what it is that we as a nation value most and wish above all else to accomplish in the years ahead.)

2) Can the curriculum be designed anew to reflect all we know and still have to find out about the learning process?

3) Will the teacher shortage be solved?

4) Will it be possible to develop schools that challenge and capture the interests of youth in the depressed neighborhoods of large cities?

5) Can we work out a better basis of financial support for our schools so that the children of Mississippi will have the same educational opportunities as the children of New York or California?

6) Building on the experience of the fifties, will we find ways to bring all sound new ideas and techniques together, to achieve not just a patchwork of improvement but a coherent design of advancement?

7) Can we improve our educational programs to make the most of human talent? (In the pursuit of excellence we cannot afford to sacrifice the variety in our educational establishment, which must remain if it is to provide equality of opportunity for all.)

A PROGRAM FOR THE 1960s

At the same time that *Decade of Experiment* was in preparation, the parent Ford Foundation was conducting a major review of its own policies and programs. Once again the report specified "educational affairs" as one of five priority areas. In the late 1950s and early 1960s, a consolidation of the Foundation and the Fund began, with the same staff serving both organizations. Small-scale programs developed and tested under Fund grants were subsequently expanded into nationwide programs with Foundation support.

As a logical response to the experiences of the Fund for the Advancement of Education, as well as the parent organization's own efforts in teacher education, the education staff of the Foundation developed a program for the coming decade. Instead of emphasizing further innovations or different educational problems, it concentrated on finding ways to bring all sound new ideas and techniques together to achieve a coherent design of advancement.

The various innovations or practices available to improve schools appeared to hold much promise. However, implementing only team teaching without a new curriculum, or installing a new curriculum without flexibility in scheduling—any piecemeal approach—would not make the significant impact needed to reverse the decline in the quality of American education.

What appeared to be missing was the capability of bringing together a sufficient number of the new practices to create a *critical mass*—a chain reaction of change that would overcome the inertia of school systems and produce significantly different educational institutions. The new program was to provide a capstone for the projects of the past decade, consolidating gains and encouraging large-scale implementation.

Known as the Comprehensive School Improvement Program (hereafter referred to as CSIP), it sought to encourage simultaneously the following practices: 1) team teaching, 2) the use of non-professional personnel in schools, 3) flexible scheduling, 4) variable size pupil groups for instruction and new space arrangements, 5) the use of audio-visual resources, including educational television, 6) programmed instruction, 7) language laboratories, 8) educational data processing by machine, 9) independent study, 10) advanced placement and early admissions, 11) nongraded school programs, and 12) school and university partnerships for curriculum improvement, and pre- and in-service teacher preparation.

Underlying these specific practices were four key assumptions that helped shape the programs: 1) that the purpose of a school is to promote learning, not teaching; 2) that learning is a continuous process and must be related to an individual student's abilities and needs; 3) that curriculum in all content areas should be built on a continuum from the beginning to the completion of formal education, rather than be frozen by grade levels or age of pupil; and 4) that there needs to be a constant and continuous examination of the ways by which schools facilitate learning in order to take advantage of discoveries and developments.

The partnership of schools and colleges or universities was thought to be essential for improving education, and the collaboration was expected to be mutually rewarding. The expertise of higher education could be brought to bear on the problems of elementary and secondary education, and, in return, actual classrooms would be available for teacher training. Better education and better-trained teachers would result.

An additional ingredient necessary for the critical mass was the involvement of as large a unit of the educational system as possible—ideally all staff members at all grade levels and in all content areas of a particular school. Further, if this critical mass could be achieved in different types of schools —rural, suburban, and big city—in various places around the country, the chain reaction would be of such magnitude that it would encourage changes in school systems which were not a part of the program.

Since not all school systems seemed willing or able to pursue such an extensive approach to change, and since in any case the Foundation's funds could not usefully be spread too thin, sites were selected where: 1) local objectives were in harmony with the objectives of the CSIP; 2) staff sophistication was sufficient to handle the necessary array of innovations; and 3) the financial resources were sufficient to continue the programs, if desirable, once Foundation funds were no longer available.

The Foundation awarded the first grants in a few suburban communities (Newton, Massachusetts; Norwalk, Connecticut; and University City, Missouri), in one small rural eastern city (Bennington, Vermont), and, through state education agencies, to several small communities in the West (for example, Meeker, Colorado; Pioche, Nevada; and Wagon Mound, New Mexico). Since the pur-

pose of the program was to influence education broadly, efforts were made to select leading educational communities that could serve as "lighthouses" to guide other school systems.

The absence from CSIP initially of school systems in the nation's very largest cities was due to the fact that another Foundation program already under way was related to schools in major depressed urban neighborhoods. This effort was known as the Great Cities–Gray Areas Program. The first part of the term derives from the Great Cities School Improvement Program, begun in the mid-1950s by superintendents of schools and school board members of ten large cities. Beginning in 1960, the Foundation made grants totaling $2.8 million for experiments in nine of these school systems—Buffalo, Chicago, Cleveland, Detroit, Philadelphia, Pittsburgh, San Francisco, St. Louis, and Washington. "Gray areas" refers to the fact that the neighborhoods in which the school experiments were located lay between the commercial centers and the cities' newer suburbs. They were characterized by heavy concentrations of older dwellings; low levels of income, education, and vocational competence; shifting populations; racial minorities; and large influxes of migrants from rural areas or other urban centers.

A high proportion of gray-area students do poorly in school, attend irregularly, and drop out before finishing. The Great Cities–Gray Areas Program sought to make the schools more responsive to the special needs of these children. It supported such services and techniques as in-service training for teachers, including summer sessions on remedial reading and other priority needs of gray-area children; use of school buildings for afternoon, evening, and Saturday programs; use of nonteaching neighborhood residents as school-community agents; trips, clubs, and other cultural-enrichment activities outside the schools; and intensive academic and vocational guidance and job placement.

Essentially, these efforts were what later became known as "compensatory education," and were closely replicated on a broad national scale under the federal Elementary and Secondary Education Act. Compensatory education failed to stem the deterioration of urban education in the 1960s. The shortcomings of the Great Cities–Gray Areas Program itself were barely beginning to be sensed by the Foundation just as CSIP went into high gear. Peter Marris and Martin Rein, writing in 1967, provided a penetrating analysis of these shortcomings.* They noted:

> . . . reforms were to be instituted in cooperation with the school system, and carried out by the teachers themselves. Only by involving the system and its staff, and so committing them to the new approach, could the limited resources of the projects inspire widespread innovation. Such a strategy called for tact and subtlety. If the teachers already acknowledged the prejudices which frustrated their efforts, the projects were hardly necessary. But if they did not, how would they cooperate in a reform whose wisdom they failed to recognize? To challenge their prejudices openly might lead, as [one project] discovered to 'strongly defensive, near hysterical resistance.' . . .
>
> . . . the projects . . . set themselves a task which was inevitably beyond their resources. They depended upon the school system for access to the teachers, and upon their cooperation in carrying the programmes out. Innovation was therefore limited to objectives which school and project could readily agree upon—or at best, to objectives which the school could tolerate, in return for support for its own more orthodox ideas. . . .
>
> . . . It seems, then, that the projects could help the schools to develop educational methods already widely accepted in the teaching profession—remedial reading, counseling, team teaching, cultural enrichment—provided that the changes were tactfully introduced, and everyone was prepared. If they tried to insinuate more challenging innovations, which questioned the teacher's basic assumptions, the schools might not give them a fair test, and the trading of unwilling

Dilemmas of Social Reform: Poverty and Community Action in the United States. New York: Atherton Press, 1967.

commitment to each other's aims only condemned all the programmes to halfhearted and muddled implementation. If the projects went round the system, innovating where they had more freedom, they still had to face the integration of these facilities with classroom expectations they had scarcely influenced. . . .

But these are retrospective judgments, which, while applicable also to CSIP, came too late to influence its directives. The new energy that characterized school-improvement efforts, such as CSIP in 1961 and the federal programs in the following few years, was tinged with optimism.

A CHANGE IN DIRECTION

The Comprehensive School Improvement Program had been in operation less than three years when major changes occurred. The earliest civil rights protests of the 1960s led to a new awareness of how little had been achieved in addressing the problem of inequality of educational opportunity. It also was realized that most of the Foundation's previous spending had been in northern communities, and it was decided to allot large portions of the CSIP funds for use in the South.

In time it became clear that the "lighthouse" programs under way in the "select" school districts would not yield new ideas or programs that were entirely, or even largely, transferable to schools serving disadvantaged children. New types of "compensatory education" programs were needed, and the emphasis shifted toward funding proposals which:

1) concerned school systems with large concentrations of disadvantaged students and less financial resources, rather than the districts already considered to be the leaders in education;

2) focused on the early years of education rather than kindergarten through twelfth grade (the earlier the intervention, the greater potential for impact);

3) attempted to provide compensatory education at the same time more fundamental changes in the school system were being made so that in the long run compensatory education programs would no longer be needed;

4) placed much more emphasis on the collaboration of universities and colleges in school improvement, each project involving both traditionally black and all-white institutions of higher learning;

5) assumed the slow pace of integration after *Brown vs. the Board of Education* in 1954 would continue for at least another decade, and thus additional means of improving education were necessary.

In some ways, the shift in emphasis of CSIP significantly narrowed the goals of the program. Rather than trying to bring about a renaissance in public education generally, and for all students, the focus was now on the "disadvantaged"; rather than working at all grade levels, activities were concentrated at the preschool and elementary school levels. Yet in other ways, this shift enlarged perspectives and opened up the possibility of addressing other "urgent questions" raised by the *Decade of Experiment*.

The twenty-five CSIP projects did not all fit one of the two general models (i.e., pilot or compensatory), but all shared common characteristics related to the original rationale. All projects did deal with a number and variety of interventions rather than just one new approach; although not all projects encompassed all grades, each did work with a number of age levels; and college or university involvement was part of each project. Some of the projects, however, emphasized in-service training of teachers, others curriculum development, and still others new organizational patterns.

ACTION PROJECTS vs. RESEARCH

All the projects were designed to demonstrate actual changes in school systems. For most, the underlying theme was action rather than the devel-

opment of research designs or the collection of additional data about schools and children.

Since the emphasis was on implementing new practices, evaluation and research did not receive high priority, even though sizable amounts of money were spent for these purposes. Insofar as evaluation and research were pursued, there was little overall coordination of the effort. In line with the program's standards, evaluation generally took the form of impressionistic descriptions of project activities by the project directors themselves and occasionally by outsiders. The first serious group consideration of evaluation problems occurred at an initial conference of project directors in January 1965. But this was, in effect, too late, since twenty of the twenty-five projects were already under way and the possibility of going back and building a rigorous evaluation was remote, if not impossible.

In addition to the evaluation of project activities, more formal research efforts became a part of a number of projects. According to one analysis, these generally suffered from poor design.* Project objectives were stated in such vague and global terms that it was impossible to say with any certainty whether or not they had been reached. Goals were often stated in *input* or *process* terms, on the assumption that changes, *per se*, would produce better education. Relatively little emphasis was placed on the actual educational *outcome* of the projects.

This lack of rigorous evaluations was typical of virtually all university, government, and Foundation change efforts in education before the mid-1960s. When the decade began, it seemed clear that certain types of staffing and curriculum changes would produce certain improvements in education. The Coleman Report (*Equality of Educational Opportunity*, U.S. Office of Education, 1966) exploded that myth and provided important data on the differences between schools—ghetto to suburb, North to South. The report also pointed indirectly to the inadequacy of previous educational evaluations that assumed a uniform cost/quality-relationship for public schools.

Beyond the fact that national evaluation standards were drastically changed during the middle of the CSIP decade, it is clear that evaluating the wide range of CSIP projects would have been difficult in any case. Even if more precise evaluation mechanisms had been developed for the "lighthouse" projects early in the decade, completely new evaluation devices would have been needed later because the emphasis and objectives of the projects shifted so dramatically with the creation of the compensatory education projects.

But notwithstanding the weak evaluation mechanisms typical of CSIP, a great deal can be learned from these projects about the types of changes that are feasible and the various factors that make them more or less so.

FUNDING

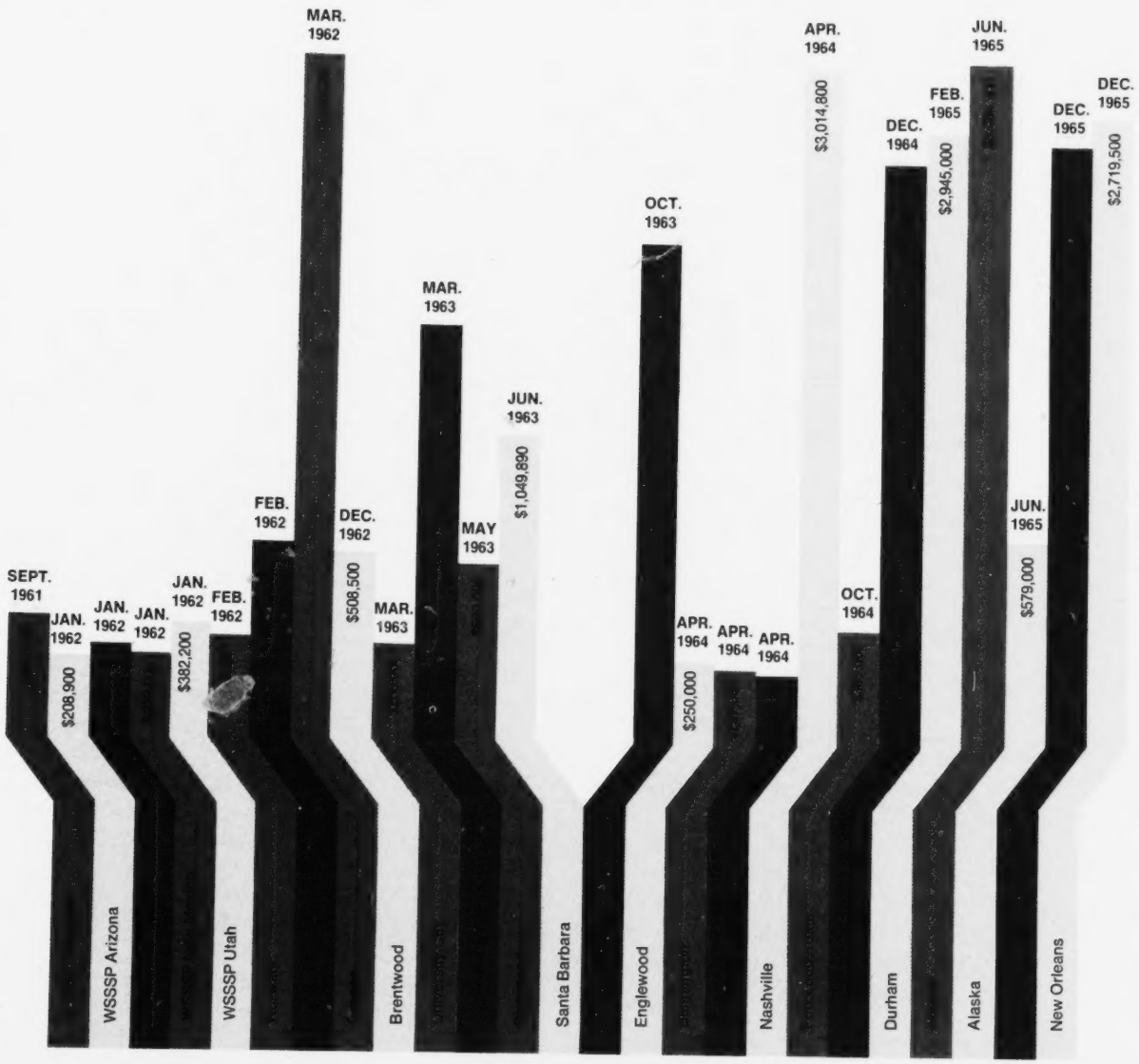
Grant Amounts and Sequence

In all, the CSIP involved a Foundation investment of more than $30 million.** Figure 1 indicates the sequence of the grants, as well as their relative amounts. The shift from small "pilot" to larger "compensatory education" grants is indicated by the chart. The size of the grants tended to cluster at the extremes of a continuum, rather than in the middle. Eleven were below $500,000 each, with seven of these at about the $250,000 level. Six of the grants, by contrast, were for approximately $3 million each. Four fell between these levels, as follows: $968,000, $850,000, $1.4 million, and $2 million.

*"A Review of Selected Reports of Studies from the C.S.I.P." by Dr. Percy D. Peckham (1970), who was asked by the Ford Foundation to review research reports. Mimeographed, 40 pages, available on request from the Foundation.

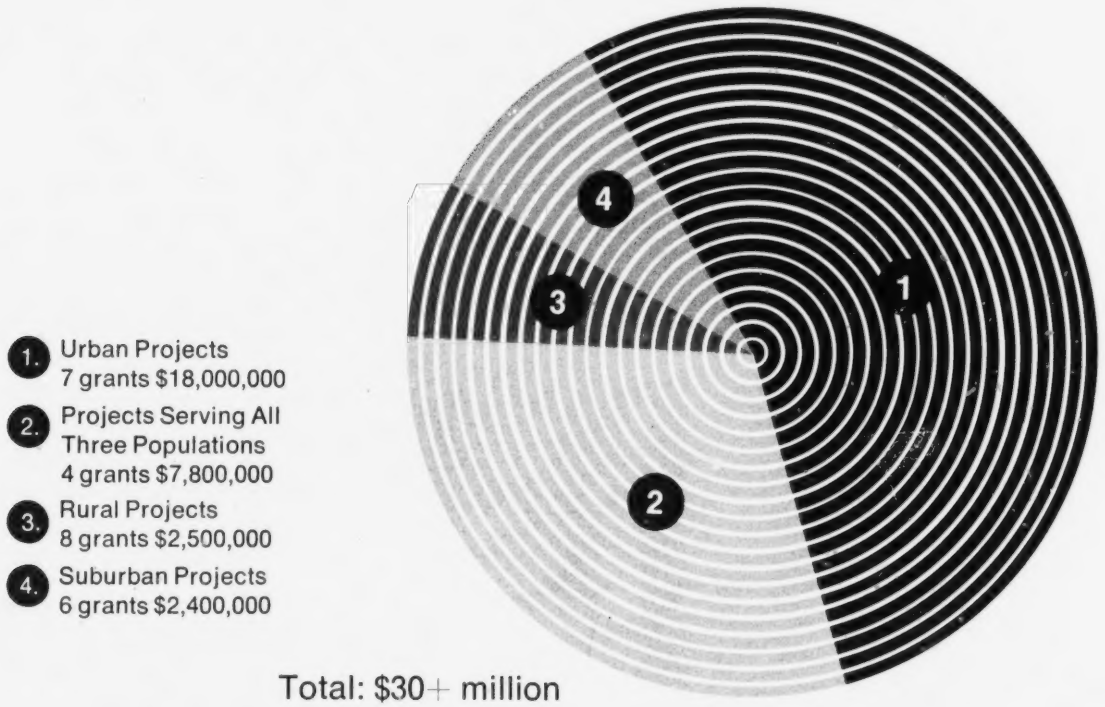
**Appendix A contains a complete list of projects and the grant amounts.

Figure 1
Funding by Amounts and Sequence



Total: $30+ million

Figure 2
Funding by Community Population

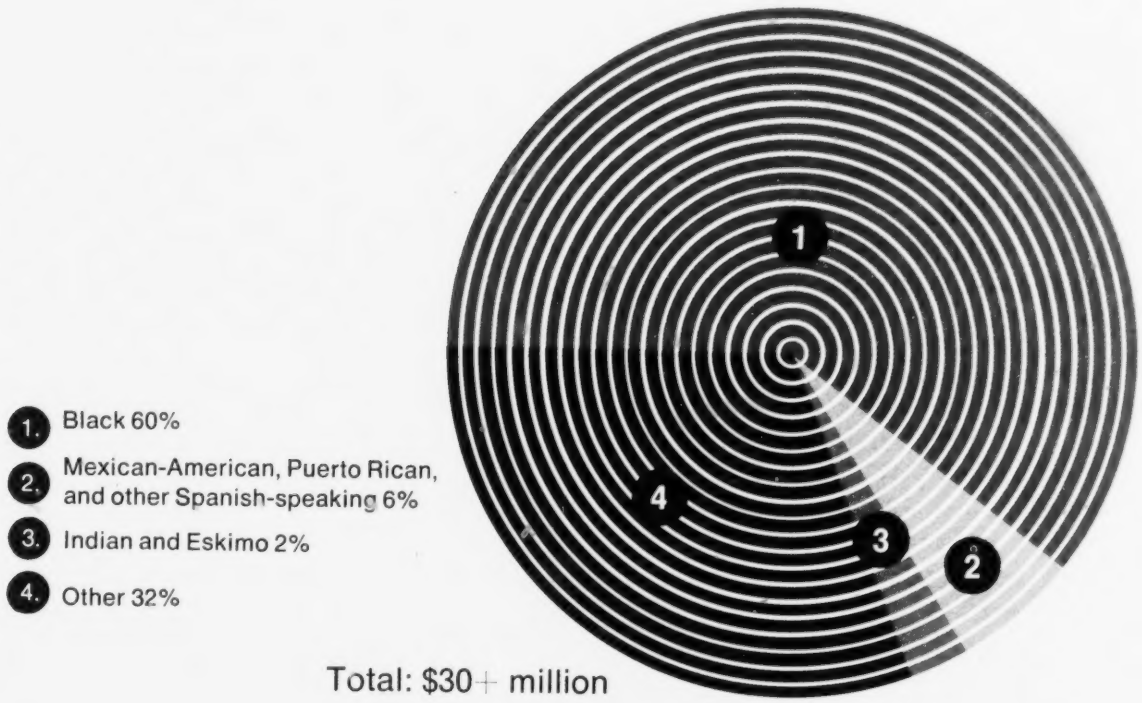


Funding by Community Population. The projects tend to fall into groups differentiated by the type of student population involved, which in turn dictated the nature of school improvement efforts undertaken (see Figure 2).

RURAL—Some 7 per cent of the funds went to projects in rural areas. The Western States Small Schools Project (WSSSP), building on an earlier program assisted by the Foundation and the Fund for the Advancement of Education—the Rocky Mountain Area Project for Small High Schools—explored ways of individualizing instruction, the use of technology to overcome the isolation of the rural community, and approaches to vocational education (career selection) suitable for small schools. The Bennington (Vermont) Project focused on the improvement of curriculum and the reorganization of the schools to enable all students to progress at a rate appropriate to their interests and abilities. The Milton (Pennsylvania) schools, building on a Susquehanna Valley Program of Cooperative Research, worked on in-service training of teachers to make the best use of the technological and curricular resources. The Alaska project was concerned with a more systematic and realistic plan for recruiting and preparing teachers for the schools in local villages.

SUBURBAN—Another 7 per cent went into suburban school systems. Generally, these projects were the most consistent with the original CSIP design, simultaneously implementing team teaching, new curricula, modular scheduling, and so forth. However, here, too, there were many differences, partly based on the varied characteristics of

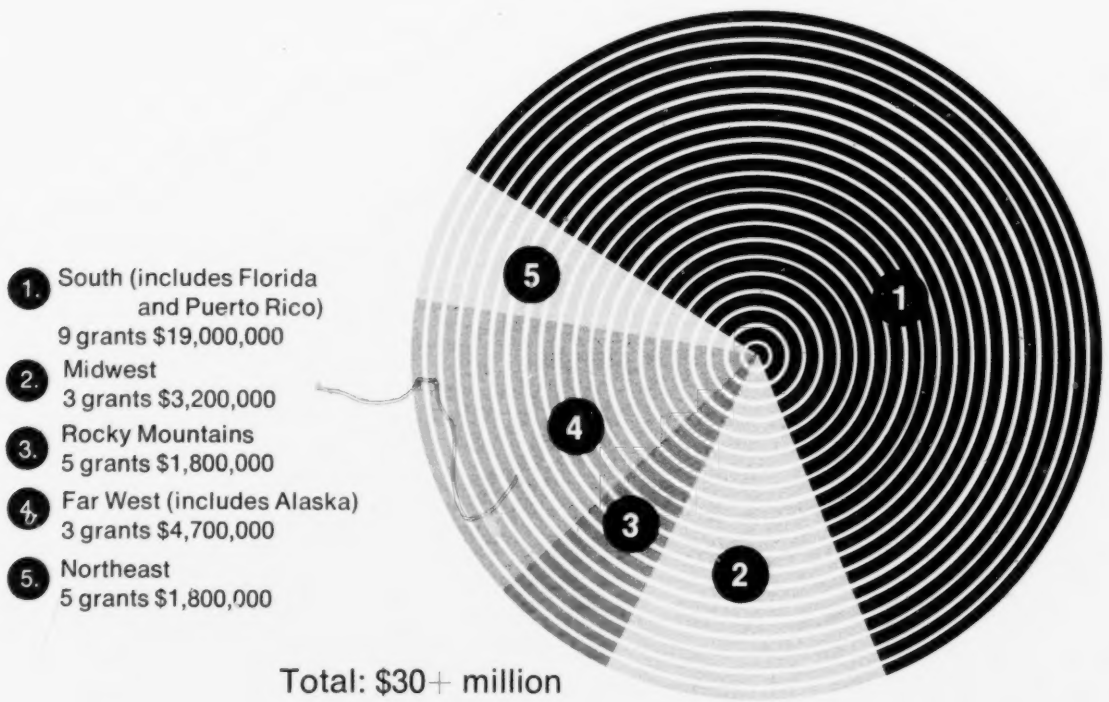
Figure 3
Funding by Racial and Cultural Group



the suburbs. Three were in upper-middle class communities—Newton, Massachusetts, which operated experimental programs with the resources and in the general neighborhood of Harvard University and MIT; Fort Lauderdale, Florida (the Nova Schools), where an educational park concept was being implemented; and University City, Missouri, which educated children of the professors working in the nearby colleges and universities. Two were middle-class communities in transition —Englewood, New Jersey, which was beginning to feel increasing demands from black residents, and Norwalk, Connecticut, where emphasis was on educational television and film libraries as well as new staffing and organizational patterns. A blue-collar suburb, Brentwood, New York, focused on curriculum development.

URBAN—The major portion of funds (60 per cent) went to urban projects—not the big cities of the country but those ranging in population from 75,000 to 600,000. Richmond, Virginia, was the first of the compensatory education projects. The Pittsburgh grant included the "new practices" of the original CSIP design, a compensatory education program, and efforts to blend academic and vocational education into a comprehensive school. Atlanta, Durham, Huntsville, Nashville, and New Orleans comprised the Southern Education Improvement Program. Each was concerned with the educational difficulties of black and other disadvantaged children and pursued some type of compensatory education program. Durham was relatively research-oriented, trying to gain new insights into both the characteristics of disadvantaged chil-

Figure 4
Funding by Geographic Region



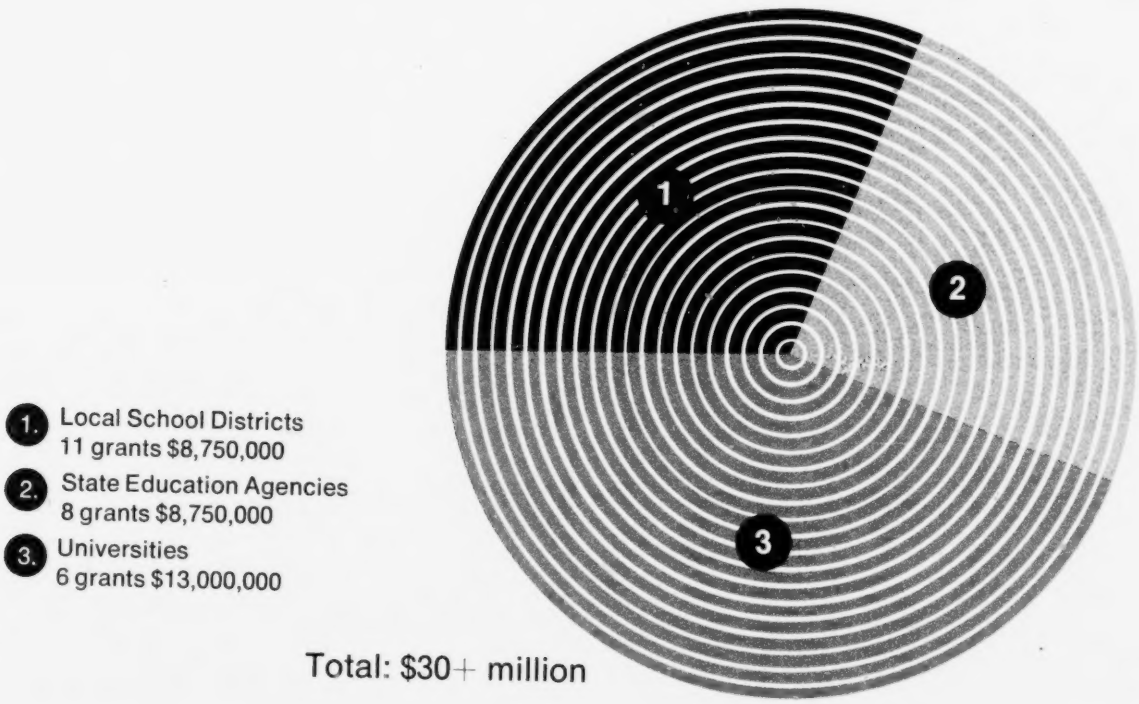
dren and the appropriateness of behavior modification techniques for instruction. Huntsville established a pre-first grade program; New Orleans saturated the project schools with instructional resources, i.e., films, transparencies, film strips; Atlanta and Nashville concentrated on improving reading, implementing a new science curriculum, and increasing community involvement.

OTHER—The remaining four projects received a fourth of the funds (26 per cent) and involved all three population groups. Oregon and North Carolina were state projects. Oregon concentrated on the development of the teacher-intern concept as it related to implementing the "new practices." North Carolina built its efforts around the formation at the elementary level of teaching teams, each including a teacher aide. The Santa Barbara project served as a facilitating agency to improve the educational programs of several cooperating schools and the teacher-education program of the University of California at Santa Barbara. The Puerto Rico project joined a proposed high-school curriculum project and teacher-training program into a common effort.

Funding by Racial and Cultural Group. Approximately 60 per cent of the funds went to schools that were predominantly black (see Figure 3), 6 per cent to Mexican Americans, Puerto Ricans, and other Spanish-speaking, 2 per cent to the Indian and Eskimo populations, and the remaining 32 per cent to predominantly white schools. Regionally, the South received larger grants and the largest share of total grant funds (Figure 4).

Funding by Type of Grantee. Perhaps the most

Figure 5
Funding by Type of Grantee



Total: $30+ million

significant aspect of the distribution of CSIP funds concerns the kinds of recipients involved. Figure 5 indicates the proportion of grants awarded to local school districts, state departments of education, and universities.

It is noteworthy that about 29 per cent of the funds went directly to public schools, and another 29 per cent to state education agencies, while universities served as fiscal agents for the remaining 42 per cent. On the one hand, the large proportion of funds going to the universities indicates a somewhat indirect approach to public school reform. But, when these expenditures are compared with those of the 1950s, it becomes clear that the Foundation was taking a more direct approach by funding public school systems and state education agencies. For instance, of the first 300 grants awarded by the Fund for the Advancement of Education, between 1951 and 1956, 84 per cent of the funds went to colleges and universities, only 4 per cent went directly to public school systems, and the remaining 12 per cent went to other education agencies, such as state departments of education.

The shift in these proportions during the 1960s is significant. In part, the change indicates the Foundation's growing realization of the limits of the capacity of universities to provide solutions for major problems in the schools. Second, the change demonstrates a rise in the relative importance attributed to teachers, school administrators, and, in some instances, parents. In general, during the decade, the Foundation broadened its search for people and institutions that could help solve the problems of American education.

II. educational objectives

CSIP sought to consolidate the gains of the 1950s via extensive field testing of educational innovations. As a broad-scale effort, it included a wide range of objectives, some unique to a single project, others shared by several projects. The specific objectives cluster in two major areas: organization and administration; and professional development and classroom practices.

This chapter concentrates on CSIP's role in teacher development and changing educational practices. The implications of the experiments in organization and administration are discussed in Chapter III.

PROFESSIONAL DEVELOPMENT AND CLASSROOM PRACTICES

The major approaches to the problems of professional development and classroom practice were: 1) new patterns of staff utilization, 2) development and use of new curriculum materials, 3) use of technology, 4) experiments in grouping of students and utilization of time, and 5) innovative arrangement and use of school space.

Staff Utilization

Modifying patterns of staff utilization in school systems was intended not only to improve the efficiency of the teaching-learning process but to break down the isolation of the self-contained classroom, to facilitate professional interaction, and to improve teacher competency. Changes in staff utilization appeared in virtually all the CSIP proposals, and included team teaching models, use of teacher aides, intern programs, new approaches to teacher supervision, and teacher retraining.

The term "team teaching" was applied to a variety of staffing arrangements and patterns of operations. In some cases it appeared to be little more than teachers talking shop during coffee breaks; in others, joint planning constituted team teaching. Cases in which two or more teachers held joint responsibility for the education of a common group of children were relatively rare. Perhaps the most prevalent approach employed was that of assigning a team leader for the group of teachers, with the group having some responsibility for joint planning of its respective teaching tasks.

The teaming of teachers was attempted most often in the suburbs (Newton, Norwalk, Englewood, University City) where the curriculum was oriented to college preparation and parental demands for scholarship were high.* In Newton, team teaching involving classroom reorganization did not take hold as originally planned. The thrust of the effort here seemed to be toward the joint planning of new curriculum materials. Team teaching tended to be most extensive where flexible grouping of students was a concurrent priority—in Englewood, for example, where teams were widespread and generally effective. The Norwalk approach to teaming (which provided an extra salary increment to the team leader) has fallen off somewhat in the last few years, except in one or two schools.

The concept of paraprofessionals also incorporated a wide range of functions and roles. In the Southern projects, it signified assistants in the offices, cafeteria, or halls and was a means for parents and other residents of the community to identify with the school. On another level common throughout the CSIP, it applied to classroom assignments ranging from clerical to assistance in the teaching process. In some cases, nonprofessionals really became members of teaching teams and were encouraged to advance professionally. Aides also played an important role in resource and media centers.

North Carolina combined the two concepts. A

*It is no coincidence that an earlier Fund for the Advancement of Education-supported effort—the Staff Utilization Project of the National Association of Secondary School Principals—had been most influential in suburban systems.

team of two or three teachers plus an aide was appointed to develop project proposals and seek funds for the local schools and districts participating in the project. Project funds paid for the aides in the beginning, firmly establishing the practice in the state.

The new staffing patterns in urban and suburban schools generally were adaptable to the rural schools. There were opportunities for teachers to work together in teams, as well as for total school planning. Teacher aides were found useful, especially in New Mexico where the law was eventually changed to recognize them, and individual student learning—always more feasible in the country school—was especially effective. An additional contribution of the Western States Small Schools Project to staff utilization was the paraprofessional concept inherent in the Career Selection Program. This approach made extensive use of the talents of men and women from the community for teaching specific vocational skills. In some instances (Haxtun and Meeker, Colorado, for example) these specialists became an integral part of the instructional program; in others, they contributed little more than conventional vocational guidance.

Several projects used teaching interns. This was especially true in teacher preparation in Oregon, where a fifth-year program for interns achieved statewide prominence, and legislation has been proposed to make a fifth year part of the certification requirements. Elsewhere, the practice took various shapes for building field experience into a teacher-training program. These ranged from a "student teaching" assignment in the fourth year of an education sequence to an additional year for a prospective teacher who had acquired a B.A. or B.S. degree or a fifth-year experience with credit toward a Master's degree.

In a number of locations, e.g., Oregon, University City, and Englewood, a new variety of support personnel emerged to take the place of the usual "supervisor." The role of these educators was to provide a type of in-service education in the classroom, teaching demonstration classes and giving suggestions in implementing new approaches.

Micro-teaching, the use of video tape to record, analyze, and improve teaching performance, although not developed in CSIP, was employed in a number of projects (Alaska, New Orleans, Nova, and Norwalk). Since this technique has only recently been available to schools (with the advent of low-cost recorders), it is too early to tell whether or not it will become a regular feature of in-service teacher training once outside funds are no longer available.

A model for teacher retraining emerged from the Center for Coordinated Education at Santa Barbara. A perceived teacher-leader is selected by the teaching staff and, using current critical issues as the content, he helps other teachers learn to work with children. Stress is placed on inductive learning—the teacher lectures very little, but responds to students' questions.

In summary, while substantial amounts of Foundation and federal monies were being allocated to teacher-preparation programs at the college level, CSIP directed more attention to specific school situations. Because the majority of CSIP teachers continue to function in self-contained classrooms, it is impossible to assess the permanence and depth of changes generated by innovative projects; i.e., changes in teacher behavior and in classroom style, or modification of teacher attitudes toward students and toward curriculum. The most subtle and significant changes in these areas do not depend on formally restructured classrooms. On the other hand, the use of paraprofessionals—a trend that the Foundation helped reinforce—has clearly resulted in permanent change, introducing new cadres of people into education, providing channels of access into schools for many more blacks and for those without previous formal training, and encouraging many nonprofessionals to ful-

fill formal requirements for certification. Within CSIP, however, little was done to sift the theoretical implications of this development and the questions it raises about the characteristics of effective and ineffective teachers, and about the function of certification procedures and other aspects of teacher recruitment.

In a variety of ways, then, the focus on staff utilization provided a significant context for professional growth. The men and women involved were, for the most part, an average cross-section of those in education. The projects, however, created a climate that enabled ordinary people to perform in extraordinary ways. This influence on people's lives, especially apparent at top levels of organization, extended throughout the ranks of teachers and paraprofessionals involved in the projects. Through mobility and imitation the benefits of such growth accrue not just to the project or the school system but slowly become dispersed across the country.

Instructional (Curriculum) Materials—Development and Use

"Comprehensive school improvement requires change throughout all aspects of the school, including . . . the nature and structure of the curriculum. . . ." This emphasis, found in the Newton and Norwalk grant documents, is reflected in virtually all the projects. Each project struggled with the nature and structure of the curriculum in a different way. 1) Some spent their energies implementing the "new" curricula—AAAS and BSCS Science, ITA Reading, Words in Color, SRA Reading, to name only a few. 2) A second approach was the sequencing or repackaging of existing curriculum for the purpose of individualizing instruction. Detailed directions were written to allow students to "progress at their own rate"; sets of mathematical problems were taken from books and printed on single sheets of paper; spelling words were recorded on tapes—all attempts to design programs for the needs of students. 3) In other cases, new materials were written where specific needs were apparent. Most of these efforts appeared to be in social studies, where specific materials were generated to make the content more relevant, as for example, "A Seaport: Boston Harbor Change and Development" and "Water: Quabbin to Boston," both produced by the Newton project. Another example is an American studies program of University City. Other materials were developed in an attempt to deal with the emerging awareness of black identity (Norwalk, Englewood, Brentwood) and with pre-school education (University City, Durham). The Alaskan Readers (initially developed by the Alaska Rural School Project, later picked up by Northwest Regional Laboratory) were designed specifically for use by children in the isolated villages of that state. Another approach grew out of two cases where additional grants were made for preparation of special materials. Santa Barbara received a grant to develop teacher in-service materials, which were a part of a total in-service education design. Nova was given a grant to develop "Learning Activity Packages," consisting of behavioral objectives, learning activities, and evaluation exercises in the field of technical science. This approach to curriculum now provides the basis for instruction in most of the subject disciplines in Nova schools.

During the early 1960s, two major curriculum approaches dominated the educational scene: Programmed Instruction designed to individualize instruction, and the curriculum reform movement generated by Jerrold Zacharias of Massachusetts Institute of Technology, Jerome Bruner of Harvard University, and others. Programmed materials based on the work of B. F. Skinner, Robert Mager, et al., were heralded as a great breakthrough, but early examples were poorly constructed and available only in a few subject matter areas. The "small-step" learning sequences often created problems of student motivation and, in CSIP projects, interest

in programmed instruction soon waned. Although many of the early materials found their way to the book storage room, some of the principles involved, i.e., behavioral objectives, carefully structured learning sequences, and criteria tests, were incorporated in local curriculum efforts, those of Nova and Milton in particular.

CSIP efforts to put into practice the curriculum reform movement of Zacharias and Bruner posed more complex problems. Professional curriculum developers prepared curriculum units, first in mathematics and science, that integrated the contributions of the scholar and the classroom teacher. Building on central concepts of a discipline, the units were academically sophisticated and acceptable, but they tended to be extraordinarily expensive and to demand especially careful teacher preparation. Moreover, experience has shown that similar materials in areas such as the social sciences require several years for design, testing, revision, and preparation for publication. Within CSIP, the greatest acceptance of these new curricula was in suburban school districts where the projects were more consistent with the original CSIP model for change. Although the materials were not universally accepted, CSIP efforts did result in most schools moving from a single textbook curriculum to one that incorporated a great variety of materials.

Many new curricula did find permanent homes in CSIP schools. The Initial Teaching Alphabet is now an integral part of University City's reading program; various new science programs are common to many of the high schools. However the new curricula that require a significant outlay of funds or basic changes in teacher behavior (American Association for the Advancement of Science, for example) are less likely to be continued.

But despite the packaged curriculum movements, widespread commitment to develop curriculum within each project required a heavy investment of teacher time. Under the rationale of local uniqueness, project teachers almost universally felt the need to create their own materials. There is no overall assessment of how much of this material was generated. It also is not known precisely whether teachers were simply unaware of recent curriculum units that were readily available or whether they were conditioned to resist the so-called "teacher proof" units regardless of their quality and availability.

In many instances, the overproduction of inadequate curriculum units at the local level was not the fault of the individual projects. Rather, the projects were doing what they had been funded to do. The Foundation staff itself had underestimated the difficulties in producing new curriculum units. As we now know, partly from that experience, any significant process for curriculum development must meet a number of demands: scholarly input to assure intellectual rigor; expertise in learning theory and child development to support methodologies; extensive testing, evaluation, and revision; programs for teacher-training; and procedures for dissemination. Within CSIP, few curriculum development activities attempted to move to the cutting edge of the discipline or to experiment on learning theory and child development. Materials were put into use too quickly to allow for adequate testing and revision; and most materials generally are not used by anyone other than the teachers who created them. (When the Brentwood Project did make a conscious effort to disseminate materials, the project in effect helped to subsidize the publishing business by providing writers for new English and social studies series.) New materials can provide greater variety, but, without strong scholarly grounding, they do not necessarily foster new learning. Without broad dissemination, impact is minimal in terms of time and money invested. In terms of both cost and student teacher learning, the adoption of professionally developed curricula produced far more substantive change than in-house curriculum development.

Use of Technology

The activities of CSIP in the use of technology covered the gamut, from exploring new instructional uses of the tape recorder and filmstrip projector to using dial access television. Some projects spent no Foundation funds for equipment and software, while others spent up to $100,000 per school building (New Orleans). The more sophisticated programs (closed circuit TV, large tape and film libraries) were found in the suburban schools where extra dollars were available and there were enough students to justify the expenditure. The smaller districts were limited in their experimentation to simpler, less expensive approaches.

Norwalk and Nova, both suburban projects, emphasized the use of technology. The Norwalk closed-circuit TV system reached into some 350 classrooms, with sixty local productions during 1969 alone. An instructional materials center, of which the TV system was a part, had six full-time staff members and housed, in addition to other visual resources, some 9,000 audio tapes.

Nova was one of the first to explore the resource center idea, through which study carrels were equipped with dial access audio and visual channels. Also, part of its efforts were experiments with the storage and retrieval of printed information on microfilm, and creation of the visuals (slides and overhead transparencies) to support large group instruction.

As projects began to focus on approaches to individualization of instruction, the uses of technology began to shift. Large group instruction, inherent in the design and necessary for the financial justification of the more elaborate systems, seemed antithetical to individualization. The use of the closed-circuit TV systems, particularly at Nova, diminished as individualization of instruction progressed. Instead of needing one source of information for a class, a half dozen might be needed. To meet this problem, Meeker, Colorado, installed multi-channel audio systems in its classrooms. Elsewhere in the Western States Small Schools Project, technology (e.g., telephone teaching) played an important communications role in reducing the isolation of small schools.

The overall contributions made by CSIP in the use of technology were limited. To be sure, great numbers of teachers were exposed to, and encouraged to use, overhead projectors, tape recorders, filmstrips, etc., and in many cases these practices continue. In far too many instances, however, equipment of all kinds is gathering dust. The ongoing costs of maintenance and production are much greater than originally anticipated and have been accentuated by the financial crisis now facing schools. In general, the use of such equipment has fallen off markedly within the projects.

The ties between improved instructional capability and the use of technology are elusive. CSIP projects incorporated technological devices at a time when they were first being adapted to education on a large scale. A wide variety of hardware was available, but software was scarce and of poor quality. CSIP experience, therefore, cannot stand as an adequate measure of the potential of technology instruction, but it does clarify some of its probable purposes. Within schools, closed-circuit TV, tape and film libraries, and audio-visual systems can be used either 1) to purvey more information more efficiently to more students, or 2) to stimulate new modes of learning. The evidence suggests that the new types of equipment are effective for simple communications where these are needed. But to justify technological developments on grounds of increased efficiency runs the risk of merely following a fad, and CSIP experience suggests that, because of the high cost of purchase and maintenance, it is not a cost-effective approach. Where equipment is used to encourage new kinds of learning experiences, the quality of the software becomes central. Films, tapes, and transparencies must be essentially related to carefully articulated learning goals, and teachers must be prepared not

merely to use machines but to integrate them with new types of classroom experience.

Grouping of Students and Utilization of Time

Once schools had made the decision to depart from the habitual one teacher/one classroom-for-55-minutes format, they faced questions such as: How will the students be grouped? When and how long will teachers and students pursue each activity?

Changes in student logistics were generally confined to the school campus and changes in the use of time to the normal school day and year. The exceptions were Nova's 210-day school term, the summer enrichment and remedial programs of Bennington and the Southern projects, and the extended day (Richmond), where children could come early or stay late to participate in large group activities, get special assistance, or simply take advantage of warm shelter. These extensions of the school day, generally limited to "disadvantaged" primary or preschool children, were usually established because mothers were working and the schools could provide care for the children.

Sophisticated modular scheduling made possible by computer technology developed during the early years of CSIP and provided a natural focus for experiments in scheduling. Again, CSIP projects were the clients, not the designers, who were university-based. Stanford University's scheduling system was used by a few such projects in the West while those east of the Mississippi tended to work with a similar scheme developed at MIT.

Other efforts in use of time and student grouping included use of double or longer class periods and rotating schedules. Durham's Southside Demonstration School (elementary) "personalized" the use of time by scheduling student activities according to children's ability to be responsible for their own actions. The Clayton (N.C.) Elementary School, where the "open school" concept is being implemented, and John Marshall High School in Portland, Oregon, offer other examples of flexible programs that are still in operation. The degree of flexibility (smaller student groups, more teacher planning time) in a modular schedule, however, is almost directly related to the percentage of free time during the day allotted to independent study. Without exception, questions of student autonomy and discipline were raised by granting free time. This, along with the perceived erosion of academic standards, resulted in pressure from the communities as well as from within schools to revert to more traditional patterns of organization. A few schools have maintained modular scheduling but modified their practices to meet the complaints; however, more than half have for one reason or another abandoned the original plan. In some cases (e.g., Nova) it was dropped in favor of other approaches to individualizing instruction, e.g., "Learning Activity Packages"; other schools, however, simply reverted to more traditional operations.

It is possible that some teachers who were uncomfortable with the practices of teaming, new patterns of scheduling, and flexible grouping saw a way out through "individualized instruction." In such cases, they would return to the self-contained classroom, perhaps with some flexible grouping within the four walls, but more than likely that would fade also.

Unlike many of the other changes, innovations in scheduling tended to affect all or nearly all staff members and therefore met with greater problems. Furthermore, the expectations of the community and, in fact, certain regulations, required that children be out of sight and confined to the school building during school hours.

Arrangements and Use of Space

Numerous efforts were made to rearrange learning spaces within traditional school buildings and to alter uses of conventional school facilities. With few exceptions (i.e., Nova, two Newton schools, Bennington), the activities of CSIP were carried out in traditional "egg crate-type" school buildings.

Projects which had the greatest influence on other traditional school buildings had been creative in their own remodeling efforts. Closets were made into study carrels, doors were cut through walls between rooms to allow for easier student and teacher movement; in some cases walls were removed, hallways became learning areas for small groups, courtyards were enclosed and utilized for large-group teaching areas, old gymnasiums became huge learning laboratories, and seating arrangements within classrooms took different shapes.

In the Southern projects, a few additional uses for school facilities emerged. Preschools were established either in vacant classrooms or in temporary buildings brought on to the school property. Parent lounges provided a place for ghetto parents to meet and to find out about school activities. Other special-purpose space was provided for a science center (Nashville) and reading clinics (Pittsburgh). Norwalk established one center for vocational arts and another for foreign language students.

During the ten-year period of CSIP, even though grant funds were not used for facilities as such, participating districts constructed many new buildings, most of which indicated the need for more flexibility. Even within this relatively short time span, considerable evolution took place, with new school designs providing different-sized spaces for independent study, small groups, and large groups. But such arrangements carried their own inflexibility, and toward the end of the decade the emphasis on fewer interior walls had resulted in the large "open" spaces being popular with children, resisted by the teacher, and generally misunderstood by parents. Certainly not all of this influence on building design can be attributed to CSIP; however, in many cases, direct relationships can be established, e.g., the "Tower of Learning" in Idaho Springs (Colorado), eight new "open space" schools in Ft. Lauderdale (Florida), Horace Mann and Burr schools in Newton (Massachusetts), and Foxrun school in Norwalk (Connecticut).

Even such minor changes in the educational system as new approaches to space utilization often caused problems. Custodians complained that the additional cabinets, equipment, and lack of uniformity in seating arrangements made cleaning more difficult. The community and some teachers often interpreted the clutter and additional noise resulting from learning in large open spaces as lack of discipline. Above all, however, the CSIP experience demonstrated that physical facilities do not necessarily dictate the type of instructional program. Very creative programs did occur in the most traditional settings, and very conventional programs could be found in modern facilities.

EMPHASIS ON TEACHER DEVELOPMENT

Despite the multiplicity of program objectives, the Comprehensive School Improvement Program was first and foremost a teacher-development effort. In all the projects, the teacher was seen as the key to school improvement. The teacher's skill and attitude were identified as the central factors in moving a school beyond the status quo.

CSIP turned out to be one of the more massive and significant postwar teacher in-service efforts, although not specifically designed for this purpose. It took place in the classroom or in workshops directly related to the classroom. New teaching methodologies, new materials, and new organization provided a pragmatic, experience-oriented education program that, while in certain cases short on theory, was realistically geared to the perceived interests and needs of teachers in the classrooms.

The full import of this emerges when CSIP is placed in historical context. The Fund for the Advancement of Education's *Decade of Experiment* had emphasized that U.S. education problems related to both quantity and quality. The chapter on "Efficient Use of Teachers' Time and Talent" called for new methodologies as a means of offset-

ting the alarming teacher shortage. The current oversupply of teachers, however, tends to obscure the role played by the Ford Foundation and the Fund in filling the prolonged teacher shortage of the fifties and early sixties. Programs and experiments supported by the Foundation encouraged the professionalization of the teaching role, which led to enhanced job status and a higher number and caliber of applicants. Ironically, this same professionalization has entrenched a power-structure that frequently, though not always, blocks innovative efforts.

SUMMARY

The CSIP interventions provide concrete and constructive information on the complexities of change. Innovations in staff utilization clearly emerge as the most successful and most permanent, since changes in teacher behavior and attitude could be effected within a school or inside a few classrooms with a minimum of disruption, and often without the community's full awareness.

The introduction of new curriculum materials and new technologies produced changes—some lasting and some temporary. Where packaged curricula are accompanied by systematic teacher training, as in mathematics and science, they tend to continue. Where they are locally produced, or require substantial changes in faculty behavior, they tend to be discontinued. Both new curricula and equipment have profound implications for learning styles and classroom behavior. Without systematic teacher preparation, however, usage tends to be superficial, sporadic, and ephemeral, ignoring the potential for significant improvement in the teaching-learning process.

Innovations relating to the use of time (such as flexible scheduling) and to student groupings have also disappeared from several of the projects. These, too, demand different teaching behavior, and they impinge more directly than other changes on intra- and extra-school relations. Modular scheduling and independent study, for example, create an atmosphere that challenges the notions of order, discipline, and learning traditionally associated with schools. As students of any age are given more freedom to talk, to move, and to decide where, when, how, and what to study, parents, community, and even teachers become apprehensive that the culture is being eroded.

Changes of fundamental order demand understanding and support. Staff, students, parents, and community must be part of a long-range process that prepares the way for serious rethinking about school functions. Despite the current popularity of "open campus" programs, the pattern of retrenchment from innovations in timing and grouping, characteristic of the few CSIP projects that tried them, exposes, in a concrete way, fundamental issues in the relations between a school and a community and, in a theoretical way, the role of schools in a society.

III. change strategies: lessons for funding sources

Along with the CSIP shift from small experimental grants to middle-class school systems, and later to large grants for compensatory education programs in urban school systems in the mid-1960s, the Foundation's relationship to the individual projects also changed markedly. Before 1965, most of the proposals were coming from school systems that generally agreed upon the need for experimentation; and the projects themselves, while they created a few local conflicts, were not highly visible or controversial. Thus, though it may appear paradoxical, the Foundation was still able to support changes while playing a relatively passive role. In most cases, school officials requested and Foundation officials responded. In the Foundation, overall educational policy guidelines were determined; applications were processed and rejected or accepted; occasional site visits were made to check on the execution of projects; and grant recipients summarized their progress in annual reports. The Foundation and much of the nation still held the attitudes of the 1950s: innovation was regarded as stylish and even as an end in itself rather than as a means to a more crucial overhaul. The schools and the Foundation displayed little urgency about whether the undertaking actually addressed the root problems facing American education, and even less concern about whether the projects related to the larger underlying social and political problems of the nation.

By the mid-1960s, however, several developments foreshadowed basic changes in CSIP.

First, the "comprehensive" approach to educational innovations required more Foundation coordination than the piecemeal innovative approach of the fifties. Information and ideas needed to be shared among the projects.

Second, when the plan to develop a "critical mass" of innovations that would really overcome the inertia of school systems began to do just that, it also began to generate conflict among the groups affected. Careful Foundation timing and more vigorous efforts were necessary if particular aspects of the projects were to survive local bureaucratic and political problems.

Third, increasing awareness of the extent of inequality of opportunity in America's educational system and increasing activism on the part of civil rights groups made it clear that entirely different types of educational change would be necessary and that these would further increase the levels of conflict and the need for planning and coordination. Community control was not yet part of the vocabulary, but it was on the minds of those in the community ghettos.

Finally, an "evaluation revolution" had begun, raising profound questions about the outcome of all these projects. It was becoming obvious that simply funding projects would no longer be enough and that better ways would have to be developed to monitor their impact as well.

In sum, a heightened sense of Foundation responsibility developed along with an increasing awareness that Foundation-sponsored educational changes could not be implemented in isolation from broader social problems and conflicts. Clearly, more fundamental, more effective, and possibly more controversial programs had to be pursued. As part of its efforts to meet these new conditions, the Foundation appointed a full-time "circuitrider" who was responsible for improving communications among the projects and between them and the Foundation. Thus the Foundation's relatively naive laissez-faire position of the early 1960s was transformed into one of active partnership in change. The Foundation staff, far from unified on the best strategy on substance of change, generally remained nondirective with the projects, attempting to serve as resource personnel and not as absentee directors. But much more attention was paid to how the objectives of the projects were being pursued and whether or not they were attained. Foundation staff members became more critical of the Foundation's and, indeed, each other's initiative.

This new style of active yet still distant participation on the part of the Foundation did not always go smoothly. In some cases it was difficult, in others impossible, to develop candid working relationships with grant recipients. The habits of either changing projects arbitrarily to meet new Foundation ideas, or glossing over difficulties in implementation and evaluation, lingered. In most instances, cooperative relations developed over time. In one city, however, serious problems arose from weak project-university relations, the use of funds to substitute for local expenditures rather than to supplement them, and evidence of a poor fiscal management and reporting system. The Foundation had to choose between terminating the grant or intervening heavily to redefine the goals and structure of the project in mid-term, and the latter course was taken.

Thus it became increasingly apparent later in the decade that the Foundation had to contribute more to educational change than money. More attention had to be paid to the ways in which projects were conceived, organized, and operated, but in the rush of day-to-day affairs little time was spent analyzing the relative effectiveness of various innovative patterns.

INNOVATIONS: IMPLEMENTATION AND MAINTENANCE

Discussed below are the various factors that had an impact on the management and outcome of the projects: the governing structures, operational placement of the projects, selection of the project participants, implementation techniques, project leadership, mobilization of additional resources, community size, grant size, and the timing of grants.

Governing Structures

Local District Organization. The simplest organizational structure placed authority for the project within a single school system, making the local board of education the responsible fiscal agent (Milton, Brentwood, Englewood, Newton, Norwalk, Pittsburgh, Nova, University City, Richmond, and Huntsville). In Huntsville, for example, the project became a distinct department called Early Childhood Education. It was answerable first to the assistant superintendent for instruction, then to the superintendent, and finally to the school board. In Pittsburgh, the assistant superintendent for curriculum and instruction was responsible. In Newton, an alternative department of curriculum and instruction was designed to compete with the existing department working in the same areas. Norwalk established an office of special projects, which was responsible first for CSIP and later for federal grants.

The tendency under such arrangements was for local boards to be highly involved in the proposal preparation stage but for their interest to fade once the original grants were received. In most instances, too much distance developed between the projects and the local boards, so that the projects provided little guidance to other segments of the school system. For the most part, they were incapable of displacing the more peripheral and antiquated organizational structures. School and classroom innovation did not seem to require much experimentation with how boards and administrative officers supported teachers and principals whose jobs might be jeopardized. Since the Foundation grants contributed little toward solving the economic crises—even then apparent to boards and administrators—the projects were unable to create major organizational changes that required continuing school board interest in their progress and success.

Other Single-Agency Arrangements. The grant for the Alaska Rural School Project was given to the University of Alaska's College of Behavioral Sciences with the governing board of the university serving as the responsible body. An Advisory Committee was appointed, including representatives of

the State Department of Education, the Bureau of Indian Affairs, and the College of Behavioral Sciences; later the state assumed responsibility for funding the project. In Oregon, the grant was made directly to the State Board of Education.

In North Carolina, a grant came to the State Board of Education* through an independent development agency funded by government and foundations, the North Carolina Fund, dividing responsibility for the project between these two organizations. In addition, 228 separate North Carolina school districts were engaged in the program so that a certain amount of the responsibility was shared with local school boards. This was further complicated since the State Department of Education, which was largely responsible for the actual implementation of the grant, was directed by an elected official, the North Carolina Superintendent of Public Instruction.

Confederations. Each of the Southern projects, with the exception of Huntsville, had governing structures similar to one another's. All were formed through the Southern Association of Colleges and Schools. The projects were operated by policy boards, including representatives of all-white colleges and universities, traditionally black colleges (where involved), and the public schools. All the parties were engaged in the supervision of the projects, and their leaders, presidents, deans, and superintendents served on the policy boards. In all cases, the fiscal agent for the project was the white college or university, and thus both imputed and real power tended to concentrate at these institutions. A variety of factors led to the Foundation's decision to give Southern white universities financial responsibility for the projects even though the projects were intended to help blacks. It was partly a matter of dealing with the existing political and organizational realities. A grant of $12 million to the black institutions during the mid-1960s would have alienated even some moderate white leaders. The low prestige of many of the black colleges (at least among whites) might have reduced the willingness of public school systems and the white universities to cooperate. And there were naturally more resources available at the white institutions for the administration of the projects. But the decision was also partly out of habit, and partly a judgment of which organization seemed to hold the power of educational change. Clearly, the black institutions could not develop the necessary resources without outside aid. And almost as clearly, leaders of the white institutions, though they professed interest in the projects, and were also interested in being known as educational innovators, often lacked vigorous commitment to the goal of equality of educational opportunity.

Two other projects, those in Bennington and Santa Barbara, involved a mix of educational agencies, including universities and colleges as well as both private and public schools. In both instances, a project office was created for the CSIP program. The policy boards for both projects were large. The Bennington Cooperative Project for Curriculum Development originally had a fifty-member board, including project personnel along with school board members, faculty, lay public, principals, superintendents, and deans of colleges of education. The board for the Santa Barbara Center for Coordinated Education included representatives of fifteen agencies, including superintendents, the chancellor of the University of California at Santa Barbara, the dean of the school of education, principals from the public schools, and headmasters from private schools.

Regional Effort. The Western States Small Schools Project was governed by the five chief state school officers, with the project coordinator directly responsible to this group. These five policy board members had responsibilities to both the project

*This project should not be confused with the Durham project, which is discussed later under Southern Education Improvement Program page 30.

and their respective state boards of education. In addition, more than 100 local school boards shared the responsibility because their districts participated.

Although there were several variations in terms of organizational design, the projects fell into two basic categories: those located within an existing educational organization and using the lay school board as the responsible policy-making body; and those located outside of existing educational organizations and having policy boards comprised of the chief executive officers of the participating agencies.

Each approach had its own weaknesses. Lay boards of education tended to be too distant from the projects to facilitate close cooperation among project directors, assistant superintendents, superintendents, and the board itself. Preoccupation with operating details concerning the overall school system, and lack of experience with making and implementing serious, long-term policy decisions, restricted the constructive roles of the school boards. In several cases, superintendents were the chief agents and intentionally or unintentionally isolated their school boards from the projects. In addition, few boards had the foresight to arrange regular communications between themselves and the project directors. However, at the same time that these boards were too distant to support the actual projects effectively, they also remained just close enough to the projects to confuse the lines of authority and to limit the autonomy of both line administrators and project directors. Finally, and possibly most significant, there is little real evidence that the boards truly believed that the proposed innovations would solve their problems.

The newly created policy boards had some similar problems. While the use of chief administrators noticeably improved communications among the interested parties, it led to an even greater competition for the time and interest of board members. The largest boards, such as those in Bennington and Santa Barbara, were seldom able to meet in full membership, much less to function effectively. In addition, the inclusion of administrators on these boards meant that executives were being asked to step into new policy-making roles that are not easily assumed.

Further, these newly created coalition policy boards often lacked "political clout" in the local context in which innovations were being attempted. In contrast, local school boards had more knowledge and understanding of existing bureaucracies, though at times this political proximity hindered rather than encouraged change efforts. Still another problem for the new boards was that the "federations" were often artificially created. For instance, among the participants in the Southern projects, there were "forced" institutional relationships, varying levels of commitment, and disagreements as to what should be done.

Finally, while the Foundation's and grantees' attention to policy structure of projects was necessary, there is scant evidence that continuation of worthwhile programs or their abandonment is related to one or the other patterns of governance.

However, two major principles derive from the experiments with both organizational models—the single-agency school board and the coalition policy board of key administrators. Interest in a project, and commitment to its objectives, was highest either just before the grants were made or within one or two years after. The larger the grant in proportion to the funds of the receiving agency, and the less competition there was from other special projects and grants, the higher the commitment. (Indeed, the $3.5 million grant to the Oregon State Department of Education not only drew great board interest but also increased the board's influence with both the public school systems and the colleges and universities.) Thus, innovative grants are subject to a "honeymoon" phenomenon similar to that found in political life. The implication is that foundations and other grantmakers should plan more carefully at the outset and maximize

their impact while interest and commitment are high. The desire of recipients to obtain funds might encourage them to agree to more significant innovations, and, in those instances where the financial incentive was not enough to obtain such agreement, assistance agencies might well be warned away from a situation where only the most limited changes are likely to succeed. Such a move would be a marked change from current practices in which assistance agencies often compromise their initial standards and goals to gain a recipient's acceptance of minor innovations, hoping that strong relations will build over time and that significant changes will occur in the long run. This assumes that assistance agencies have a responsibility and the wisdom to set standards on how their funds should be used . . . a point of highest importance for those seeking to use external funding as an incentive for educational improvement and equality of opportunity.

The possibility of invoking such new grant-making policies raises two grave problems for the funding sources. First, it would be necessary to have clearer ideas of what constitutes significant and worthwhile educational change. Second, the nation's highly bureaucratized urban school systems —which may need changing the most—might be isolated from assistance programs because of consistent unwillingness to design projects intended to produce major changes. In short, the CSIP experience tells us little of how to make and oversee local policy decisions on how to spend grant funds.

Operational Placement of the Projects

The structures developed to implement the projects in participating school systems fell into three major categories: the independent subsystem; a dispersal of project activities throughout entire school systems; and a focus on special populations within particular segments of entire school systems. These structures developed more as a function of the goals of the particular projects than by design, but the experience with each of the structures provides useful guidance for similar efforts in the future.

Independent Subsystems. In general these were designed as "lighthouse" projects—to show the way for others. The Nova project, which was both organizationally and physically separate from the remainder of the school system, is the clearest example of this type. The project had its own campus on an abandoned airfield. All the Foundation grant and staff resources were concentrated in this one campus, along with substantial federal funds, making it the experimental setting for the district. It was estimated that at one point 60 per cent of the teachers in the Nova elementary and high schools had extra Foundation or federal money with which to work.

Two other CSIP subsystem projects—those in Durham and New Orleans—had more modified levels of autonomy. The Durham project took place largely within the city's existing South Side Laboratory School; and the New Orleans project was concentrated in two adjacent black elementary schools, Phillips and Nelson. In both cities, the project director was given substantial authority in working with teachers on content and process of education in the subsystem.

Projects Dispersed Throughout the System. University City, Englewood, and Milton exemplify the second pattern of organizational structure. Innovative efforts were dispersed throughout the system, "infecting" the schools with new ideas wherever conditions were favorable. Milton and University City, in particular, had a high degree of staff involvement, with nearly all the teachers helping to define critical needs, determining the innovations that might best meet those needs, and then encouraging involvement in those innovations. Englewood achieved about the same degree of teacher involvement through an administrative decision to organize one sixth-grade school for the entire district and to introduce team teaching in the rest of the schools. Racial integration was the catalyst.

Projects Directed at Special Populations. A few projects, but representing by far the largest outlay of grant funds, focused on compensatory education for disadvantaged students, i.e., Huntsville, Nashville, Richmond, and segments of the Pittsburgh grant. Project activities were generally limited to schools primarily serving disadvantaged students. The aim, through massive new services and materials, was to improve student performance but not necessarily to introduce innovations that might produce significant structural, organizational, or attitudinal changes on the part of the school staff.

Implications of Operating Structures. The subsystem structure seems most successful in developing and implementing a series of simultaneous innovations. The Nova subsystem with its organizational autonomy, exceptional amounts of outside funding, and teachers and students who participated voluntarily, was freest to pursue its major objectives. The students were accepted only by application, were required to pay for their own transportation and to attend a longer school year, which meant that the project had both a receptive student population and a parental constituency sympathetic to new educational approaches.

Nova and the modified subsystem in Durham and New Orleans were intended to be "lighthouse" guides to educational change. The assumption was that administrators and leading teachers in the larger systems would visit the subsystems, analyze them, and then return to their own schools to implement similar innovations. This subsystem approach to encouraging innovation had only slight impact on the main school systems, however. Broward County adopted a few architectural and programmatic ideas developed at the Nova Project, and a few practices of the Durham EIP were also implemented in selected schools throughout the system. But there certainly was no major transfer of specific innovations, and even less transfer of a spirit of innovation, from the subsystems to the parent systems.

There appears to be an "umbra phenomenon" that prevents those close to the "lighthouse" from being clearly guided by it. The sources of this phenomenon, furthermore, lie within the subsystems as well as the larger systems. Employees in the larger systems are often threatened by the possibility of changed job descriptions and educational programs. They often find it difficult to admit that others within the system are innovating successfully when they are not. And they generally react negatively to being left out of both the recognition and the funding that come along with foundation grants and special projects. At the same time, personnel within subsystems often adopt "superior" attitudes. They are possessive about their projects, and for reasons not entirely under their control they tend to alienate colleagues in the parent system.

An additional problem posed by subsystems was pointed up by the experience in Brentwood where an experimental program in social studies was established outside the regular school system. The project became a special target for public dissatisfaction, partly because many people found it easier to attack than the regular school system, which had the benefit of long-term legitimacy to protect it.

The most interesting positive consequence of subsystems has so far gone unobserved, however. Most critics have judged such systems merely on the basis of their impact, or lack of impact, on the larger systems of which they are a part. But, in fact, if subsystems can develop successful new educational programs in their special experimental environments, they also can find larger school systems that are willing to follow their lead. The CSIP subsystems attracted a considerable amount of on-the-spot attention from educators from more distant systems, and a significant number of the subsystem ideas were then adopted or adapted by other schools. It appears that, up to a certain point, the farther a school system is from the "lighthouse," the more visible, credible, and helpful it becomes.

This suggests that a network of subsystems around the country could have major impact on a wide range of school systems across the country. However, since the principal "payoff" in change seems to occur at a distance from the "lighthouse," sources of experimental funds would necessarily be external. Who these days will spend precious local money to facilitate significant improvement 500-1,000 miles away?

On the other side, projects that were dispersed throughout the entire school system often did diffuse the innovations within the system more readily than the subsystems. This was partly due to the nature of dispersion itself. The jealousies and antagonistic competitiveness engendered by the subsystems were avoided by this method. Also, dispersed projects were more effective in spreading changes because their objectives generally were less threatening to existing job structures and curricula. In general, these projects attempted less comprehensive changes than in the "lighthouse" or "pilot" schools, and the limited nature of the innovations themselves seemed to be a key factor in their acceptability locally. In short, the effectiveness of dispersed projects, where the principal objective is local change, seems clearly superior to the subsystem model.

Furthermore, although projects that were spread throughout school systems did not receive wide publicity, visitors from other school systems found such projects to be more realistic than the subsystem projects, and therefore were inclined to adopt limited, but nevertheless new, ideas. While seemingly obvious, the point must be that individual teachers, principals, and school groups, regardless of their motives for changing, could feel in control where limited projects were observed. Subsystems require total commitment and a higher level of risk taking.

The third type of operational structures—those in which projects were aimed at special populations—generally involved adding personnel, equipment, and curriculum materials, often quite similar to resources already in these systems. These projects were largely to provide more of the same, rather than innovative educational programs, and therefore did not confront the same problems that faced those projects attempting educational innovations. Unfortunately, their efforts to supplement educational services to disadvantaged children generally had little impact on other segments of the same system or on outside systems. This was true partly because the compensatory programs were prohibitively expensive for most schools, and partly because the results of the compensatory efforts themselves were quite mixed in some cases and negative in others. In truth, the project addressed to a "target population" could not have been an effective strategy for change of the system. Its assumption was that something was wrong with the population—not with the system.

Selection of the Project Participants

A wide range of procedures was used to determine which teachers and students would participate in the CSIP projects. The most automatic approach was used in some of the projects focusing on compensatory education—Atlanta, Huntsville, and Richmond. Teachers and students in one of the target schools or areas were, *ipso facto,* part of the project. In some of these instances, staff requested transfers because their own practices and values were too different from those of the projects. At the opposite extreme was the Nova project. As noted on page 31, both the teachers and students in this project were volunteers. Although most of the projects used procedures falling between these two models, the extreme cases were useful in pointing up a strategic question facing change agents.

The rationale for the Nova approach assumes that "to initiate a new program, one must have the deck stacked in his favor; only interested, dedicated, creative participants should be included in project efforts." The alternate model—the one that

imposes the project on a relatively unselected group of participants—is based on the underlying assumption that "an innovation, to have any credibility, must be capable of implementation by an average cross-section of participants." Both models have their particular strengths and weaknesses, and experiments should generally be attempted in both "select" and "normal" environments.

Among the projects was one additional experimental model for selecting project participants. Funds granted to Newton and Pittsburgh were used to create and finance miniature foundations at the local school-system level. Teachers were asked to submit their own project proposals. Substantial numbers of teachers participated in the application stage of the program, but there were frequent ambiguities and misunderstandings about the objectives and guidelines for the proposals, and there were necessarily many more rejections than grant approvals. Thus, numerous disappointments and faculty conflicts arose, and many of the problems that generally accompany change efforts were exacerbated. Here again neither strategy for participant selection seems more effective. It is entirely possible that innovative efforts might be attempted with a natural (unselected) sample of participants, or that projects dispersed throughout systems might confine themselves to teachers and students who participate voluntarily.

Implementation Techniques

The basic approaches to introducing and implementing teaching changes were similar, regardless of the operational structure (subsystem or dispersal) or method of selecting the project participants. The primary tool was the "how-to-do-it" lesson, provided to teachers either by having them visit other projects, attend workshops, or hear from specialized consultants. For the most part, these events took place after school, on weekends, or during summer vacations. Although this arrangement avoided interruptions of the regular school schedule, it also meant that such efforts were continually seen as additions to normal job assignments. Without released time and without special credit or other credentialing recognition for participation, enthusiasm tended to wane after project funding ceased. Although this technique cannot be equated entirely with voluntarism—many teachers were paid for their added efforts—it operates on the same principle or has the same effect as "moonlighting"—i.e., the regular job comes first, and the spare-time project, the workshop, or the classroom visit are an energy-draining nuisance or, at best, a source of added income. In neither case does the school system or other project element signal that the project is as important as business as usual.

Project Leadership

No matter what the governing structure of the projects, by far the greatest responsibility (for their design, implementation, maintenance, and improvement) lay with the project directors. As noted earlier, this occurred largely because the governing boards were intended to make policy rather than handle operational matters, and partly because the laymen or specialized administrators on the boards had little experience with policymaking so that some of this work also devolved upon the directors. Thus, the success or failure of a project probably was determined more by the performance and continued service of the project director than by any other single factor.

This high dependence of the projects on individual leaders was compounded by high turnover, a serious problem faced by all change agents. Of the twenty-five projects, only four had the same director throughout the period of Foundation funding. When directors changed, so did basic interests and capabilities. Existing priorities were abandoned or neglected, new ones were established, and resources had to be devoted to gearing-up again and resolving the uncertainties that accompany that

process. In a few instances, the replacement of directors led to project improvements, but in most the effect was detrimental. Another aspect of this problem is that some project directors left in anticipation of the scheduled cessation of outside funding, sensing an impending decline in local support for the project. Naturally, their resignations tended to create self-fulfilling prophecies, with the districts allowing the projects to atrophy rather than searching for new directors to keep them running with local funds.

In general, during the decade of the 1960s, grant recipients had more autonomy and responsibility in the selection of project directors than they had during the 1950s. Many of the earlier project grants went to agencies known to the Foundation and the Fund, and individuals known to Foundation officials received many of the project leadership positions. By contrast, in later grant negotiations, major emphasis was placed on evaluating the project proposal and less on the people who would lead the project. While this meant that project directors were selected some time after the grant was made and generally were acceptable to the most directly related local groups, it also seems to have produced higher turnover and occasional problems of limited leadership capacity. On the other hand, there was a distinct tendency in most cases for the director who was present at the creation to remain faithful to the project and to the understandings expressed when the Foundation and the grantee were negotiating. Also, projects developed faster than experienced leaders could be found. But the most serious leadership problems may have been a function of the complex and controversial nature of many of the CSIP projects.

More fundamental than all of these may be the emphasis that America's social value system places on mobility. The irony is that this value system is so strong that it overshadows concern for the long-term maintenance and improvement of innovative projects. Most of the project directors simply went on to bigger and better jobs, as a result not only of their own capabilities but also of the expertise they developed in managing the projects, and the visibility that accompanies such positions.

The effects of this turnover might not have been so serious if methods had been available for selecting new directors similar to those who were leaving, or if new directors could have been chosen who were particularly capable in special phases of projects.

Thus, two important implications derive from the experience with CSIP project directors. First, foundations and other funding sources should consider efforts to modify the prevailing high mobility value system and to provide incentives for more leaders to remain with their change efforts until these are implemented and firmly established. Naturally, no creative leader should be coerced into remaining, but there are a variety of positive incentives that might encourage such leaders to stay. Second, as a means of capitalizing on possibly inevitable turnover, more attention should be paid when planning a project to the different leadership characteristics that are required during different stages of innovative efforts. Ideally, turnover should occur at a natural breaking point. New leaders should be chosen who are especially apt at pursuing the existing objectives rather than exclusively creating their own new objectives, thereby possibly canceling out the efforts of their immediate predecessors.

Mobilization of Additional Resources

The CSIP funding strategy was quite farsighted conceptually in one way—the recognition that a project, no matter how well conceived, funded, and led, could not prevail without the commitment of others besides the Ford Foundation and the local project.

Thus, during the 1960s, significant secondary objectives of the CSIP project included the mobil-

ization of additional resources for project recipients and the development of alternate financing methods for experimental innovations. As might be expected, additional wisdom was more difficult to mobilize than additional money.

Using the Universities. One of the primary objectives of the CSIP, from the Foundation's perspective, was to bring the universities and the schools into closer working relations. Several of the projects were designed specifically to develop university-school collaboration. To a limited extent, these efforts were effective. Personnel from the universities and schools experimented with new types of interactions; some university staff were exposed to the day-to-day problems of teachers and administrators; the notion that teachers have much to contribute to the design of college teacher education programs gained credibility; and it became clear that learning theories and new curricula must be tested quite early in real-world classrooms if they are to have general utility in the future. In one way or another, these CSIP experiences later contributed to the design of federally funded programs that either encourage or require collaboration between schools and universities.

While possible strategies for developing future university-school relations thus became clarified, in terms of the larger objectives of the CSIP projects, the actual relations were quite unproductive. Their failure was apparent despite the tendencies of both universities and school systems to make it appear that they were cooperating vigorously and successfully. School administrators tended to limit strictly the role of university consultants while at the same time gaining political and professional status by publicizing their school system's use of the university's expertise. The universities, similarly, often boasted of strong and improving "town-gown" relations, when in fact they did not exist.

"Working together" generally consisted of paid university consultants providing occasional advice or conducting research projects or evaluations. University schools of education absorbed little from the experiences that led them to alter their teacher-training programs. One exception was the Alaska Project, where a specific objective was that the university explore alternative methods of recruiting and training teachers for rural areas. In most other projects, the few close working relations that did develop were between individuals from the universities and the schools, not between the institutions. The institutions, as such, had little capacity for respecting and understanding one another.

One problem that was underestimated—and still tends to be—was that the universities' knowledge was not as useful or readily available as many had hoped or expected. As in the fields of health, transportation, and housing, universities find it understandably difficult to take account of operational and political realities in their suggestions for change. Even disregarding their frequent lack of understanding of operational problems, the universities often lacked defensible proposals for educational innovations. Their collective outlook is toward long-term changes, which are of little use to those attempting to implement specific shorter-term programs. The question, however, is not competence so much as lack of sufficient commitment and the general value system prevailing at universities. Academic and financial credit goes to faculty members who publish research and promote new ideas, rather than to those who demonstrate changes in real-world settings. In addition, just as project directors feel a need to move on to larger projects, so academics gain added status by increasing the number of their consulting commitments rather than by maintaining fewer commitments and meeting them better. Assistance agencies seeking to use university resources for change efforts should encourage the development of incentive systems that will help counteract these prevailing values, because they generally deter even university faculty members inclined to work seriously for such change. Furthermore, it is probably best for all parties to accept

that institutions cannot make commitments *per se*. Institutions change as individuals or the society cause it. Assistance agencies can seek institutional support of individual efforts—sometimes of an all-faculty interest—but not even the shotgun (agency money) can accomplish a marriage of institutions.

Encouraging Larger Programs. A second approach to mobilizing additional resources was to encourage the search for other funds from local, state, and national sources. For CSIP, the not entirely coincidental development of federal programs would provide sizable additional funds for school districts across the nation. The early objectives and experiences of CSIP had some influence on the development of the federal Elementary and Secondary Education Act of 1965 (ESEA). In particular, Title III of ESEA, which provides funds for educational innovations, has striking similarities with CSIP. First, Title III was based on a similar model for developing widespread changes—it sought to fund "lighthouse" schools, which were meant to demonstrate and then help disseminate new educational ideas and programs. Second, Title III includes the idea of "comprehensive" innovations, placing ". . . a stress on moving away from piecemeal support of small-scale individual projects to large-scale 'model' institutions where concentrated resources could be brought together. . . ." Third, there was a major overlap among the specific objectives of CSIP and ESEA, the latter including "team teaching, computer-assisted instruction, flexible scheduling, quick retrieval of educational materials, programmed learning for individual instruction. . . ." Finally, the operation of Title III grants was similar in that project proposals were developed at the local level, submitted, and selected on a competitive basis. Intermediary funding agencies were eliminated, and the school districts receiving Title III funds were related directly to special staff members in the Office of Education, and later in state education agencies.

On the other hand, in compensatory education, as distinguished from innovation, the Foundation's efforts occurred simultaneously with the federal program embodied in Title I of ESEA. Only two of CSIP's compensatory education grants (Richmond and Nashville) were made prior to the passage of ESEA, so in this area CSIP had relatively little formative influence on Title I.*

Attracting Other Funds for CSIP Projects. The majority of CSIP projects were able to obtain additional outside funding either from these federal programs or private sources. Thirteen of the sixteen single-district projects obtained Title III grants. Most of these grants were for projects directly related to those originally funded by Ford, while a few, particularly in the larger cities, were not. Four of the five southern projects plus Richmond received grants under Project Follow Through, capturing one-third of such programs in those states. In addition, the Western States Small Schools Project has had two federally-funded programs.

The CSIP schools also tended to attract additional funds from other foundations, with five of the projects being designated as I.D.E.A. (Kettering Foundation) Demonstration Centers. University City also obtained Danforth Foundation funds for programs directed toward school improvement for a community becoming racially integrated.

It is impossible to say what percentage of the CSIP schools would have obtained federal funds or other foundation funds if it had not been for the CSIP program. However, three related effects of the CSIP program are clear. First and most important, whether the specific objectives of the CSIP projects were fulfilled or not, a new spirit of urgency and a desire for innovation were created in segments of many of the participating school sys-

*Ed. note: As noted earlier, the Foundation's efforts in northern cities' school systems were of a "compensatory" nature through the Great Cities–Gray Area projects. Although there are some parallels between the earlier Ford and later Title I structures, no attempt was made through the CSIP evaluation to trace other Foundation-federal relationships.

tems, and with them a stronger inclination to apply for other experimental funds. Second, the school districts participating in CSIP developed the capability to design and write new project proposals. And third, the federal government and other foundations found that their dollars could be spent with more immediate effectiveness where school systems had already undergone the initial stages of trying to introduce innovations.

Community Size, Grant Size, and the Timing of Grants

The CSIP experience points to three additional variables that affected the implementation and outcomes of projects, and that to some extent are within the control of foundations or other funding sources—community size, grant size, and timing.

Community Size. Perhaps the most obvious lessons from CSIP relate to the size of the community or school system involved. Small rural school systems tended to have less organizational inertia; or, put another way, strong leadership was capable of significantly reducing inertia. The problems of large bureaucracies and the open social conflicts that plague the cities were noticeably absent in these school systems.

It was common, however, for innovations in rural school systems to remain particularly dependent on individual leaders rather than to become institutionally ingrained. Thus, when leaders left these rural systems—and turnover was predictably high in the smallest places—programs tended to deteriorate almost immediately. Some of the most rapid implementation of new programs occurred in rural areas, but so did the most rapid phase-out once leadership changed. Charismatic and aggressive educational leaders prevailed temporarily; the school traditionalists and the community did in the long run.

This pattern suggests still another irony faced by change agents. Once inertia is reduced so that innovations are implemented, it may be necessary to establish a new stability that permits the innovations to be maintained. While this raises the danger that change agents will become overly protective of their innovations, even when such protection is unwarranted, it also points up the need for experiments to be maintained long enough to be fairly tested. Continuing strong leadership, at either regional or state department of education levels, might have made it possible to create a new stability that would allow innovations to survive even after their initiating leaders had moved on.

Even though CSIP worked outside the nation's largest cities, the innovative efforts in medium-sized city school systems confronted a very different set of problems from those in rural and small-town systems. Conflicting community and professional groups, problems of communications, and basic disagreements over the functions of schools tended to prevent the widespread implementation of innovations. Whereas in the small school systems the innovations tended to come and go, in the large systems they usually were not firmly implanted in the first place. For example, the Pittsburgh Project's innovations generally did not extend to neighborhoods in the city other than those directly participating.

In general, the most lasting applications of the CSIP innovations appeared in the middle-sized suburbs. This occurred partly because these school systems were relatively wealthy and could afford to continue some innovations, and partly because their professional and parental constituencies were generally more favorable toward change. But it also developed because these systems were small enough to avoid fatal standoff interest-group battles and yet large enough to institutionalize changes, so that they became more than the highly perishable projects of individual leaders.

Grant Size. The size of the CSIP grants, as noted earlier, varied greatly, with the smaller grants clustering around $250,000 and the larger grants clustering around $3 million. There was no strong cor-

relation between the size and duration of a project and its impact, but it is worth noting that the smaller grants, on the average, provided experiments that lasted as long as those sponsored by larger grants.

The most helpful conclusion that derives from an analysis of the various grant sizes is that projects which had $3 million to spend in relatively short periods (four to five years) generally had more money than could be effectively spent within the CSIP framework. By comparison, the smaller grants were more productive in terms of the higher quantity and quality of participation they engendered, the number of new practices implemented, and the ultimate development of additional projects.

Timing. The matter of optimal timing for foundation actions is crucial at two distinct levels. First, a key role of the foundation is to discover serious social problems early and to work toward their solution. It is important that foundations and some other assistance agencies attempt to be well ahead of the present and the short-term future, especially since numerous federal programs are developed to deal with these periods. In addition, foundations are—or should be—particularly equipped to venture into controversial issues because of their relative political and financial autonomy.

As we have seen, the Foundation's 1949 and 1961 perceptions of educational and social problems were quite astute, but its programs were generally less farsighted. And even where there were direct efforts to solve a newly discerned problem, the Foundation's strategy was frustrated by a substantial time lag—the time it takes from preliminary discussions of a new avenue of activity or approach to a problem to approval and the start of project implementation.

Second, after basic program objectives have been determined, foundations and other aid agencies must make major timing decisions in selecting the particular groups and organizations to which grants will be awarded. Each situation must be assessed individually, since there is little precise information to assist in deciding when a group or community is ready for a change effort. For instance, social and political change or conflict may be helpful in preparing the way for major innovations that a properly timed grant can facilitate. Examples in CSIP of the importance of timing include racial confrontation in Englewood, school district reorganization in Colorado, and anticipated phasing-out of the Bureau of Indian Affairs' schools in Alaska. On the other hand, there are times when recent change and conflict create defensive reactions or otherwise inhibit innovations. Several communities that originally had CSIP planning grants ultimately were not refunded because local conflicts, involving racial integration in one instance, would not permit coordinated attempts at innovation. Also, among the projects that were funded, change was restricted by dysfunctional power struggles (Bennington) and by discontinuities in leadership and personnel (Arizona State Department of Education).

Thus, at times, change agents must attempt to encourage innovations where conflicts and changes have produced some new consensus on the need for improvements. But they must also work more systematically to develop effective projects where change is needed but conflict has not yet occurred. Given the increased levels of conflict on many fronts in recent years, the possibilities for orderly change may actually be greater now than they were during most of the last decade. Mass media portrayals of major conflicts, and the chaos and long-term problems that often accompany major conflicts, may have served to put a wide variety of interest groups on notice that difficult, negotiated changes are preferable to enraged confrontations and uncompromising efforts at radical change.

The schedule of project implementation is a crucial factor that the Foundation neglected almost entirely during the CSIP. It is clear from experi-

ences in a variety of organizations that innovations are more likely to be implemented if their overall significance is conceptualized and conveyed to the individuals who will be responsible for implementing them. And yet there were few attempts on the part of the Foundation staff to ensure that school board members, teachers, or community members truly understood the background and intentions of the CSIP program before implementation began. This oversight was offset to some extent by the fact that the grants ran for relatively long periods (three to nine years), so that over a period of time some larger understanding of the projects evolved. But there is strong evidence that thoughtful efforts to develop a deeper understanding of the goals of the projects would have created more willingness to implement them, and also to maintain them after outside financial support ended.

The point is not only *when* to educate project participants to the importance of innovations they are expected to implement, however. It is also a matter of the extent to which a variety of groups participate in the early stages of defining problems and developing innovative solutions.

To a large extent, the Foundation has moved in this direction during the last several years. More frequently it requires that those developing proposals coordinate their efforts with the groups, especially parents, that are affected by the problems involved, or would be affected by the solutions proposed. Of course, this policy has limits. It would be unrealistic and probably improper for the Foundation to attempt to mediate in large numbers of American communities in order to bring conflicting parties into full agreement on either the definition of problems or appropriate solutions. At the same time, the Foundation or any other assistance agency which encourages improvement would be remiss if it waited for complete consensus to develop regarding innovations or it awarded grants only for projects in communities where there was minimal conflict. Necessarily, if innovations are to address the fundamental problems of education—with all their ramifications for larger social issues—there will be local groups in opposition to the changes. Thus, it is essential that more systematic methods be developed for drawing the line between imposing change on groups that might have cooperated had they participated in the creation of the proposals for change, and delaying needed changes in naive anticipation of good communications and democratic harmony.

This poses a large and fundamental question for all assistance agencies which, because of laws and traditions, to say nothing of new governmental roles, must be aware of "their place" in aiding educational change.

Although it is not the function of general-purpose foundations, for instance, to involve themselves directly in local conflicts, a knowledge that funding of programs amidst conflict will doubtless create further dissension will help guide the funding procedure. On the other hand, governmental assistance agencies may find settlement of conflict at the negotiating table a required role and one not always to be performed *before* a grant can be made. Whether private or public philanthropy is involved, the grantors and grantees must weigh the costs of innovation against the gains to be made through educational change.

IV. implications

The implications of CSIP cannot be gleaned from analysis of the effectiveness of individual components. Its real import emerges most clearly from an examination of the changing meaning of the word "comprehensive."

During the program's gestation period and through its early years, "comprehensive" was generally used to describe an *approach* to school improvement. It reflected a sweeping effort to change education—that is, implementing in concert all the new practices of the previous decade; involving all staff at all grade levels; moving ahead in all curriculum areas; working in various sizes and kinds of schools; and coordinating the resources of the universities and the schools.

The objective of the program was to change the traditional habits of school systems—from self-contained classrooms to team-taught, flexibly grouped learning situations; from uniform time schedules to variable time allotments determined by learning tasks; from an instructional program bound to a single set of textbooks to a variety of curriculum materials including the latest technology.

To the program formulators of the early 1960s, the problems confronting education appeared to be much the same as those of the 1950s: too many students, the explosion of knowledge, and increased demand for trained manpower to satisfy an expanding technological society. The questions raised by those concerned with education were questions of quantity: how to educate more students, attend to more curricula, and produce more graduates. The launching of Sputnik in 1957, and the sudden emergence of professional critics of education, raised some additional questions of instructional quality.

As noted, the main strategy that emerged in CSIP was an attempt to change the educational structure through a process of teacher development. The program was largely a "professional" approach which can claim great success in changing professional practice, and this is no mean achievement. But these changes in practice were effective only within the existing classroom-oriented parameters of project schools. The limited outcomes of CSIP strongly suggest that a program aspiring to be "comprehensive" must look beyond the manipulation of variables within the school, and reckon more directly with outside factors such as financing, parent expectations, and local social and political pressures. The more fundamental the changes conceived, the more central such issues become.

It is interesting to speculate that CSIP's original design would have been much more effective if only the relative tranquility of the early 1960s had continued. But at least three important facts minimize the validity of such a hypothesis.

First, as noted in Chapter III, various CSIP innovations of both the early and later 1960s were feasible precisely because the complacency had been broken, and conflict and confrontations had occurred.

Second, as change efforts in a wide variety of educational settings indicated, the idea of a monolithic American education "system" is a myth. Thus CSIP-supported innovations developed in "lighthouse" school systems could not have solved the educational problems faced by the urban, poorer suburban, and rural segments of American education.

Finally, and perhaps most important, a continuation of the tranquility of the 1950s and early 1960s would have further postponed action on more basic issues. Problems relating to the disadvantaged, the widespread alienation of youth, and the paradoxes involved in our national values were *not* issues confronting the Comprehensive School Improvement Program, at least not in the beginning. Partly due to preoccupation with efficiency and new teaching styles, CSIP initially sidestepped such issues as equality of educational opportunity, educational philosophy, relevance in curriculum, accountability in administrative and political structures, and school-community interface.

As indicated in Chapter I, many of these fundamental questions came to the fore during the decade and altered both the content and the style of the program. As CSIP evolved and its efforts and expectations focused on education for the disadvantaged, the word "comprehensive" came to have a new meaning. Rather than describing an *approach* to educational change, "comprehensive" was now used to describe the *product* toward which the various projects were moving. A comprehensive school was one that provided enough options so that all or nearly all students could meet with success in an educational program—there were to be no educational dead ends. The projects operated under the banner of continuous progress, individualized instruction, and blending of vocational and academic education. School systems would cease to reinforce an intellectual caste system. "Vocational," "technical," and "academic" would lose their discriminatory aspects, with all programs having equal status.

"Comprehensive" used in this way had the same general characteristics as infinity. A school never arrived there, i.e., meeting *every* student's educational needs, but continued to work at closer and closer approximations.

At the outset of the decade, partly because the problems the Foundation addressed were not highly controversial, it was enough to deal with two major factors: the Foundation's own educational policies and the distribution of its own money. As the society's central problems unfolded during the decade, however, the Foundation developed an expanded sense of its obligations. It became apparent that the interrelations between education and larger social problems had to be better understood and then faced. It became clear that there were many factors requiring more forethought and more follow-through. For instance, change would not occur without stable leadership, and leadership was difficult to maintain. Beyond this, even though leadership was essential, it was not sufficient by itself. Such other factors as governing structures, implementation procedures, and timing had to be taken into account. By now the Foundation had been drawn into the midst of the complexities, and required systematic planning to continue its own leadership role. Thus, the word "comprehensive" changed considerably during the decade, and CSIP itself—almost in spite of itself—was an important factor in the enlarged meaning.

One of the most significant outcomes of the CSIP experience of the 1960s is the Foundation's changed understanding of its own responsibilities and roles. This change is recorded and symbolized by the differences in the successive reports on the Foundation's relation to American education. The 1949 policy statement, precise in diagnosing the nation's central educational problems, was optimistic that the Foundation could lead the way toward their resolution.

Decade of Experiment: The Fund for the Advancement of Education, 1951-1961, was written by staff members of the Fund. It concentrated on cataloguing numerous specific educational innovations, reiterated the 1949 diagnosis of serious deficiencies in American education, and ended on a note of considerably less assurance and a series of questions about whether or not certain key problems could be solved.

Neither the Foundation nor the Fund could address all the problems mentioned in *Decade*, but, interestingly, CSIP was addressed to what seemed then the largest question:

> Building on the experience gained in the Fifties, will we find ways to bring all sound new ideas and techniques together to achieve not just a patchwork of improvement, but a coherent design of advancement? Such a unified effort would include curriculum reform, expansion of the team-teaching concept, provision for flexibility of student grouping as well as of time schedules, and the imaginative use of modern means of communication in the classroom; it would mean a more and more effective partnership between school systems and institutions of higher learning in

the training of teachers and in educational research and development. (p. 105)

This, in effect, describes CSIP, and the lessons drawn from the CSIP efforts, more specifically detailed throughout this document, are as follows:

1) While obvious, it is perhaps important to restate that innovations took hold best where the number of schools was limited and the objectives and techniques few and sharply defined. In CSIP, the most successful and most permanent changes in staff utilization and in individual teacher behavior were started with a minimum of disruption within a single school or inside a few classrooms. Little community debate and discussion were evident before or during the innovative period. However, the impact of such restricted and sometimes unrelated efforts is minimal if the goal is large-scale influence on an entire educational system.

2) For CSIP at least, the policy and governance structures for projects seemed to have little to do with their initial effectiveness, staying power, or ultimate acceptance by the sponsoring school or university systems. Neither existing boards of public or higher education nor the quasi-official, conglomerate organizations created especially for grant purposes seemed more effective than the other in doing the job they and the Foundation at the outset agreed upon. In the former case, business as usual commanded most of their attention. In the latter, practicing administrators were asked to function as policy-makers, a difficult role for units outside the main organizational structure.

3) Larger scale change seemed more likely to occur when grantee and grantor agreed before funds were committed on the specific purpose, nature, extent, and limitations of a proposed project. General, broad-purpose grants awarded for "improving educational opportunity" or for testing innovations (unspecified) did not allow for the definition or the commitment by any of the parties to measurable outcomes. Furthermore, beyond certain essential minimums, the size of grant seemed to have little to do with ultimate success of the program. The exception seemed to be in proportion rather than amount; that is, as a grant made up a larger share of an agency's operating budget, so did it command attention of staff and policy-makers plus more aggressive discussion from the public. Debate and participation seemed to result in larger efforts for change when the grant was seen by most participants as the means toward that end.

4) The operating design of a project seemed to determine its influence and ultimate impact. For instance, the school or project funded, organized, and staffed primarily to make it a prominent and conspicuous demonstration center in CSIP did become the "lighthouse." However, the people willing to accept its "lighthouse" function generally were not those for whom its was designed. Changes in nearby school systems did not seem to occur nor was there a willingness on the part of the projects' neighbors to acknowledge its light-giving nature, whereas distant changes seemed more likely to occur and to be attributed to the "lighthouse." On the other hand, district-wide influence seemed more likely where projects practiced diffusion of activities and encouraged innovation in schools and classrooms throughout the district.

5) Directorship seemed the most critical of all possible indicators in the CSIP experience. Projects that were most effective in the short run and after outside assistance ended were those whose directors were present at the planning and remained through the implementation, evaluation, and adaptation phases. The leadership of capable directors and the continuity they provided appear in retrospect to be at least as important as organizational or policy structures, experimental models, the organization's initial commitment, or the depth and length of funding. While this is not to say that there is an inverse relationship between directors' high mobility and projects' high quality (in some cases fortune smiled upon projects as the directors

were relieved), it does suggest that the continued presence of capable, aware, and fully committed leadership should occupy as high a priority as structure, concept, and organizational commitment in the consideration of agencies when contemplating project assistance.

6) Innovation and change need the broadest possible commitment of intellectual and financial resources. While advice and technical assistance are essential before and during the life of the project, the commitments from multiple funding sources and especially from parent districts are essential ingredients, not simply as they represent broadly based intentions to stay with the program but also as they illustrate for staff and the public a budgetary and philosophical commitment to the concept.

7) Seldom did the power of the university *as an institution* function as a force for improvement of educational quality in elementary and secondary schools. The university was not seen by any of the parties as an instrument of educational reform for the nation's schools. Hence, while university faculty members worked in schools and with teachers, they functioned as part-timers—individual professionals—who necessarily promoted new ideas, could not become involved in the nitty-gritty, and did not carry with them the university's expressed commitment.

8) Not surprisingly, the less complex the school system's structure, the more easily innovations were introduced and accepted initially. Small schools changed faster than large ones. But the ease and rapidity of innovation in small schools—often attributable to the efforts and convictions of a single dynamic leader—were offset by immediate abandonment after the departure of the charismatic promoter or with reduction of external funding. Stabilization of innovative atmosphere, especially where initially it was easily generated, is an important consideration in planning and operation of projects.

9) The most lasting applications seemed to occur in middle-sized suburbs small enough to avoid the divisive debate between powerful interest groups but large enough to require that innovative movements be identified with more than individual or simple localized concerns. The fact that the suburban school districts had relatively higher spending capability than their city or rural counterparts may also have been influential, but money alone seemed not to be decisive in innovative improvement.

10) As in almost any other complex enterprise, timing in grant-making was significant. Communities approaching crises and confrontation in their school systems were more likely to waste innovative funds in the heat of controversy than those which had passed beyond the critical stage, had resolved some of the conflicts, and hence were committed to organized searches for solutions.

projects by state

(and amount of grant)

ALABAMA
Educational Improvement Program
Huntsville and Madison County
Isaac Rooks or Fulton Hamilton
Associate Superintendent for Instruction
3405 Triana Boulevard
Huntsville, Alabama 35805
($2,707,500)

ALASKA
Alaska Rural School Project
Mrs. Winifred D. Lande
Department of Education
University of Alaska
College, Alaska 99701
($579,000)

ARIZONA
Western States Small Schools Project
See *Nevada*
($208,900)

CALIFORNIA
Coordinated Education Project
Santa Barbara County
Dr. Norman J. Boyan
Dean, Graduate School of Education
University of California
Santa Barbara, California 93106
($1,049,890)

COLORADO
Western States Small Schools Project
See *Nevada*
($403,400)

CONNECTICUT
Norwalk School Improvement Program
Dr. Richard C. Briggs
Superintendent of Schools
105 Main Street
Norwalk, Connecticut 06852
($320,000)

FLORIDA
Development and Evaluation of the Nova Plan
Broward County
Dr. Warren G. Smith
Director, The Nova Schools
3600 S.W. College Avenue
Fort Lauderdale, Florida 33314
($385,000)

GEORGIA
Urban Laboratory in Education
(An Education Improvement Project)
Atlanta Public Schools
Mrs. Mildred Freeman
Director, Reading Center
Atlanta University
223 Chestnut Street, N.W.
Atlanta, Georgia 30314
($3,084,900)

LOUISIANA
New Orleans Education Improvement Project
Mrs. Anna B. Henry
Supervisor, Elementary Education
Orleans Parish School District
731 St. Charles Avenue
New Orleans, Louisiana 70130
($2,719,500)

MASSACHUSETTS
Comprehensive Program of School Improvement
Newton Public Schools
Harold W. Beattie
District Program Coordinator,
Newton Public Schools
88 Chestnut Street
West Newton, Massachusetts 02165
($538,000)

MISSOURI
The Comprehensive Project for Improvement in Learning
University City
Dr. Glenys G. Unruh
Assistant to the Superintendent for Curriculum and Instruction
The School District of University City
725 Kingsland Avenue
University City, Missouri 63130
($266,000)

NEVADA
Western States Small Schools Project
Arizona, Colorado, Nevada, New Mexico, Utah
Herbert Steffans
Coordinator, Western States Small Schools Project
State Department of Education
Carson City, Nevada 89701
($279,000)

NEW JERSEY
Englewood School Development Program
Dr. Peter J. Dugan
Superintendent of Schools
Englewood Public Schools
12 Tenafly Road
Englewood, New Jersey 07631
($250,000)

NEW MEXICO
Western States Small Schools Project
See *Nevada*
($239,000)

NEW YORK
Ford and Brentwood Research in Curriculum (FABRIC)
Raymond Fournier
Brentwood Public Schools
Brentwood, New York 11717
($508,500)

NORTH CAROLINA
Durham Education Improvement Program
Dr. Robert L. Spaulding
Department of Education
California State University
San Jose, California 95114

Infant Evaluation Component
Dr. Donald J. Stedman
Chairman, Division of Behavioral Sciences in Education
School of Education
University of North Carolina
Chapel Hill, North Carolina 27514
($2,945,000)

Comprehensive School Improvement Project
Mrs. Mary L. Evans
Division of Development
North Carolina State Department of Public Instruction
Raleigh, North Carolina 27602
($2,000,000)

OREGON
The Oregon Program
Mrs. Mary Hall
Associate Superintendent, Planning and Evaluation
Oregon State Department of Education
942 Lancaster Drive
Salem, Oregon 97310
($3,500,000)

PENNSYLVANIA
The Milton Project
Dr. J. William Moore
Chairman, Department of Education
Bucknell University
Lewisburg, Pennsylvania 17837
($224,000)

Comprehensive School Improvement Program
Pittsburgh
Dr. Louis J. Kishkunas
Superintendent of Schools
Pittsburgh Public Schools
341 S. Bellefield Avenue
Pittsburgh, Pennsylvania 15213
($2,485,000)

PUERTO RICO
Joint Project in Curriculum Improvement and Teacher Education
Dr. Ramon Mellado
Commissioner of Education
Department of Education
Hato Rey, Puerto Rico 00919
($1,400,000)

TENNESSEE
Nashville Education Improvement Project
M. D. Neeley
Federal Projects Coordinator
Metropolitan Nashville-Davidson County Public Schools
2601 Bransford Avenue
Nashville, Tennessee 37204
($3,014,800)

UTAH
Western States Small Schools Project
See *Nevada*
($382,200)

VERMONT
The Cooperative Project for Curriculum Development
Bennington
George Sleeman
Superintendent of Schools
S. W. Vermont Supervisory Union
604 Main Street
Bennington, Vermont 05201
($237,000)

VIRGINIA
Human Development Project
Richmond
Dr. James W. Tyler
Assistant Superintendent of Schools
School Board of the City of Richmond
312 N. Ninth Street
Richmond, Virginia 23219
($500,000)

bibliography

This bibliography lists publications by project. In nearly every case proposals, reports, and other documents were written and distributed by a school district or other agency which received a grant and was responsible for the program operation. Requests for publications should be sent to grantee organizations, whose addresses are given at the beginning of each bibliographical section, not to the Ford Foundation. Entries designated with an asterisk are in limited supply and may be obtained from the grantee on a loan basis.

The CSIP documents were for the most part informally prepared, usually mimeographed. When the title does not give an indication of content, a few words of explanation have been added.

Entries are usually listed in chronological order, starting with preliminary proposals and project description, adding reports written during the funding period, and concluding with materials developed as a result of the program.

Huntsville-Madison County
Education Improvement Program
P.O. Box 128
Huntsville, Alabama 35804

**A Day in the Life, Dear Parent, Health Services, E.I.P., Parent Information, A Project in Identity, Speech.* Undated. (Descriptive brochures.)

**Language Arts Curriculum.* October 30, 1969. For Huntsville-Madison County EIP Program.

*Cecil, Carl E. *Cumulative Research Bulletin.* November 1971. A summary of the four-year research program conducted as a project of the Huntsville-Madison County Education Improvement Program.

The Alaska Rural School Project
Department of Education
University of Alaska
College, Alaska 99701

The Alaskan Readers. A series of books published by the Alaska Rural School Project. Example: Arnold A. Griese, *At the Mouth of the Luckiest River.* 1969.

Orvik, James M. *Teacher Survival in an Extreme Environment.* April 1970.

*Bury, John, and Bury, Susan. *Alaska Is Our Home.* Books 1, 2, & 3. 1970.

"North to Teach." Undated. A teacher recruitment film.

Center for Coordinated Education
University of California, Santa Barbara
Santa Barbara, California 93106

(Reprints can be obtained by writing Dr. Louis J. Rubin, Communications Coalition for Educational Change, Box 19090, Washington, D.C. 20836.)

Remaking the Educational Order. April 1965.

Problems of Communication and Status in the Schools. April 1965.

The Reward System in Education—Impediment to Progress. January 1965.

Proposal for Refunding. May 1965.

Coordinated Education Project: Report on the 1964-1965 Academic Year. June 30, 1965.

Targets and Specifications: Report on the 1965-1966 Academic Year. Undated.

Prospectus 1967-1968. 1967.

The Socialization of Youth. August 1967.

Facilitator Guide: Experiments in Professional Growth. Undated.

The Professional Growth of the Educator. February 1966.

The Nurture of Teacher Growth. May 1966.

Synergetics and the School. January 1966.

Experiments in Teacher Professional Growth. Undated. (Teacher handbook.)

Teacher Inventory. Undated. Experiments in teacher professional growth.

Operational Experiments in Teacher Retraining. Undated. A proposal submitted to the Division of Education and Research, The Ford Foundation.

Frontiers in School Leadership. Undated. A synthesized report of a seminar sponsored by the Center for Coordinated Education, January 9-12, 1968.

Rubin, Louis J. "Experiments in Teacher Professional Growth." August 1, 1969. A feasibility study on a new approach to teacher retraining.

The Nova Schools
3600 Southwest 70 Avenue
Fort Lauderdale, Florida 33314

Laskey, Marilyn. *Individualize? How?* Undated.

Smith, Kenneth. *ES '70—A LAP on Writing LAPs.* November 1969.

Southern Association of Colleges and Schools
Education Improvement Project
795 Peachtree Street
Atlanta, Georgia 30308

Codwell, John E. "The Education Improvement Project of the Southern Association of Colleges and Schools—a Focus on Improving the Educational Performance of Disadvantaged Pupils." Reprint from *The Journal of Negro Education*, Vol. XXXVI, No. 3, Summer 1967.

Robb, Felix C. "Annual Report of the Director," *Proceedings*, Vol. 20, No. 9, July 1968.

Education Improvement Project: The First Five Years. November 1969.

The College Education Achievement Project. Undated.

Education Improvement Program: Experiment in Progress. Undated.

The Higher Education Achievement Program. Undated.

Urban Laboratory in Education
55 Walnut Street, S.W.
Atlanta, Georgia 30315

The Shore Still *Dimly Seen. 1969. (Illustrated brochure.)*

New Orleans Education Improvement Project
2601 Gentilly Boulevard
New Orleans, Louisiana 70122

*Thigpen, C. M., and Ahearn, J. J. *Grouping in the Classroom for Work on a Specific Unit—Social Studies.* June 24, 1968.

*Carter, John. *First Draft of Research Reports.* Undated.

**Early Childhood Education.* Undated. Describes the Early Childhood Education Program implemented in several New Orleans elementary schools, looking at its methods and assessing the results.

**Extensions*, Vol. 1, No. 2, March 1968. Focusing on the importance of "total involvement" of students, parents, and community if education is to be improved. This issue discusses significant activities and programs carried out during the first part of the N.O.E.I.P. and describes activities planned for the future.

**Community Involvement.* Undated. (Brochure.)

**Cultural Activities.* Undated. (Brochure.)

*Richards, Violet K. *Education Improvement Project—The University Program, 1968-1969.* Undated.

Comprehensive Program of School Improvement
Newton Public Schools
265 Watertown Street
Newton, Massachusetts 02158

**Work/Study: Synthesis for Choice.* 1968.

**Report of Consolidation Committee for Newton High School and Newton Technical High School.* January 15, 1968.

**Blowing on a Candle: A Study of Educational Change in the Newton Public Schools 1959-1969.* "The Whole Ball of Wax." "Sniffing a Cold Trail." "Status Report, June 1969." "The Flavor of Change: Curriculum." "The Flavor of Change: Organizational." "The Flavor of Change: Pedagogical." Undated.

School District of University City
725 Kingland Avenue
University City, Missouri 63130

Comparative Surveys of Organization and Use of Materials in the Teaching of Reading in the Elementary Schools of University City in 1962-1963 and 1964-1965. August 1965.

Inquiry into Change. (Survey Form II, 2nd part.) March 1966. A survey of present practices and beliefs.

Inquiry into Change. (Survey Form I) April 1966. A survey of beliefs.

Published by the Office of Research and Testing:

Teacher Aides: A Survey of Outcomes. June 1965.

Research and Testing: A Report of Current Studies. August 1965.

Reading: First Grade i/t/a. November 8, 1965.

Development of Logical Thinking of Kindergarten Children: A Piaget-type Program. March 1966.

Reading Laboratories: i/t/a—Primary Two and Three. March 1966.

French Language Achievement: The Effect of Early Language Instruction on Subsequent Achievement. June 1966.

Research and Testing: Supplement to the August 1965 Report on Current Studies. July 1966.

Developmental Differences among Kindergarten Children: A Study of Results of the Illinois Test of Psycholinguistic Abilities. July 1966.

Developmental Differences among Kindergarten Children: A Study of the Beery-Buktenica Developmental Form Sequence. August 1966.

Developmental Differences among Kindergarten Children: A Study of Results on the Frostig Developmental Test of Visual Perception. August 1966.

Prekindergarten Research Study: Selection of Representative Children by Lot. November 1966.

Developmental Differences among Kindergarten Children: A Study of Results on the Lincoln-Oseretsky Motor Development Scale. October 1966.

Prekindergarten Research Study: Selection and Systematic Observation of Representative Children. December 1966.

Approaches to Primary Reading. March 1967.

Prekindergarten Research Study: Skills Development Related to Age. April 1967.

Achievement of First Year Primary Children: i/t/a and T.O. Compared. October 1967.

Prekindergarten Research Study: Analysis of Pretest Data by Major Skills Development Need Phase II, Prekindergarten Field Test, 1967-1968. December 1967.

French Language Achievement: The Effect of Early Language Instruction on Achievement in Grades Seven and Eight. December 1967.

Ford and Brentwood Research in Curriculum
Brentwood Public Schools
Brentwood, New York 11717

The Brentwood Curriculum Revision Proposal. Undated.

Fournier, Raymond, and Presno, Vincent. *Advantage: A Program for Preschool Children.* 1965.

Presno, Vincent, and Presno, Carol. *Man in Action Series.* Englewood Cliffs, N.J.: Prentice Hall, 1969. A six-level interdisciplinary social science program for the elementary school.

Fournier, Raymond. *Thinking and Writing.* Englewood Cliffs, N.J.: Prentice Hall, 1969. A series of workbooks comprising an inductive program in composition.

Roberts, Gerhard H. *An Outline of a K-6 Mathematics Program Organized in 28 Levels and Correlating Textbooks and Supplementary Materials.* 1969.

Brieger, Arthur, and Miller, Helen. *The Awareness Series: A Preschool Readiness Program.* Undated. Each individual booklet is accompanied by a separate pamphlet for the teacher to facilitate her use of the material. Booklets deal with: The Clocks, Animals, Numbers, The Alphabet, Shapes, Colors, Textures.

Durham Education Improvement Program
2010 Campus Drive
Duke University
Durham, North Carolina 27706

(Reprints can be obtained from ERIC, Urbana, Illinois 61801.)

The Durham Education Improvement Program 1966-1967: Research. Undated.

Cooper, Georgia. *Opening Windows.* June 1968. A collection of workshop sessions, essays and other materials having to do with the establishment of a possible language development program.

Spaulding, Robert L. "The Durham Education Improvement Program," *Psychology and Early Childhood Education.* Monograph Series No. 4. Toronto: The Ontario Institute for Studies in Education, 1968.

Pulling Up Parents. May 1968. A discussion by members of an EIP Mothers' Club.

The Education Improvement Program. Undated. (Illustrated brochure.)

Durham Education Improvement Program: Abstracts of the 1965-1970 Special Studies Research and Evaluation Report. Final Report. Vol. III. Undated.

Annual Confidential Report of the Durham EIP, 1968-1969. Undated.

Wasik, Barbara H., and Sibley, Sally A. *An Experimental Summer Kindergarten for Culturally Deprived Children.* March 1969.

Ironside, Roderick A. *Impact of the Durham Education Improvement Program.* Durham, N.C.: Educational Testing Service, Southeastern Office, August, 1970.

Spaulding, Robert L. *Durham Education Improvement Program. Final Report,* Volumes 1, 2, & 3. Undated.

Comprehensive School Improvement Project
North Carolina State Department of Public Instruction
Raleigh, North Carolina 27602

Born-a-Growing. November 1968. A summary report of the North Carolina CSIP, 1964-1967.

The Milton Project
Milton Area School District
Milton, Pennsylvania 17847

*McKeegan, Hugh, in collaboration with J. William Moore and James Baugher. *Individualizing Instruction at Milton Junior High.* 1970.

The Milton Project—Educational Innovation with a Difference. 1970. A final report to the Comprehensive School Improvement Program of the Ford Foundation. Submitted by Bucknell University and the Milton Area School District.

A Brief History of Four Academic Departments in the Milton Middle School, 1964-1970: Math, Science, Social Studies, Language Arts. 1970.

Pittsburgh Public Schools
341 South Bellefield Avenue
Pittsburgh, Pennsylvania 15213

**Apprenticeship, Education and Work: A Resource Document.* OVT Planning & Development Staff. 1969.

*Olson, Jerry C. *Survey: The OVT Division—Charges, Accomplishments, Plans.* September 1969.

**This Is To Tell You About OVT: Occupational, Vocational, and Technical Education.* Undated. (Packet of materials.)

**Compensatory Education Services.* Undated. (Brochure.)

The Nashville EIP
Fisk University
Nashville, Tennessee 37203

**Focusing on Mt. Zeno Kindergarten.* Undated. (Small brochure.)

**NEIP Guidance.* Undated. (Small brochure.)

**K-3 Nongraded Primary Carter-Lawrence School.* Undated. (Small brochure.)

**The Nashville EIP: 1965-1969 Interim Report to the Ford Foundation.* December 1969.

*Klein, Arthur F. *Nashville Education Improvement Project: Statistical Report 1968-1969.* Undated.

*_____. *Nashville Education Improvement Project: Final Statistical Report (Partial).* Undated.

Somebody Better Do Something. Washington, D.C.: National School Public Relations Association, 1970.

School Board of the City of Richmond
312 North Ninth Street
Richmond, Virginia 23219

**Community Action Program.* February 1965. A publication by educational and civic leaders of Richmond concerning the continuation of special education programs for the disadvantaged that were started in 1963 with financial help from the Ford Foundation.

Human Development Project--Richmond Public Schools, 1965-1966. September 1966.

Community Action Programs. October 1966. (Report.)

AIDES: A Guide to Help Improve the Work of Aides in the Schools, 1969-1970. September 1966.

Western States Small Schools Project for Colorado
Colorado Department of Education
State Office Building
Denver, Colorado 80203

Quality and the Small School. August 1968.

Educating Rural Youth for Success in the World of Work. December 1967.

Staffing Plan for Upgrading Rural Schools. October 1971.

Western States Small Schools Project for Nevada
State Department of Education
Carson City, Nevada 89701

Borg, Walter R. *Perceptions of the Teacher's Role in the Small Rural School.* 1965. A study made for the Western States Small Schools Project, State Office Building, Denver, Colorado 80203.

Jesser, David L., and Stutz, Rowan C., eds. *Scheduling for Flexibility in Small Schools.* April 1966.

Stutz, Rowan C. *Career Selection for Students Attending Small Isolated Schools.* 1967.

Valencia, Atilano A. *The Relative Effects of Early Spanish Language Instruction on Spanish and English Linguistic Development.* Santa Fe, N. Mex.: State Department of Education, 1970. An Evaluative Report of the Pecos Language Arts Program for the WSSSP.

Cragun, John R., and Kartchner, Eugene C. *An Evaluation of Career Selection Education in Thirteen Project Schools of the WSSSP 1965-1968.* September 1969.

Shared Services--Opportunities for Small Schools. 1968.

WSSSP: Summer Workshop 1963. Undated.

Jesser, David L. New Dimensions for the Small Schools of Nevada. December 1966.

WSSSP: Summer Workshop 1964. 1964.

Allen, Blaine W. *Individualized Learning Through Computerized Modular Scheduling.* 1964.

Anderson, Merlin. *Foreign Language in the Small School.* Undated.

Western States Small Schools Project for New Mexico
State Department of Education
Capitol Building
Santa Fe, New Mexico 87501

Digneo, Ellen, and Shaya, Tila, eds. *Miami Linguistic Reading in New Mexico. 1965-1968.* August 1968.

_____. *Teaching Spanish to the Spanish-speaking Child. 1965-1968.* August 1968.

_____. *Report of the Career Selection Education Program. 1965-1968.* August 1968.

_____. *Report of the Extensive Reading Program. 1965-1968.* August 1968.

Western States Small Schools Project for Utah
Department of Public Instruction
State Capitol Building
Salt Lake City, Utah 84111

Stutz, Rowan C. *Summer Workshop--1963.* September 1963.

*Stutz, Rowan C., and Merrell, Russell G., eds. *Educating Rural Youth for Success in the World of Work.* December 1967.

*Merrell, Russell G. *Some Approaches to Overcoming Cultural Deprivation in Students Entering Small Rural Schools.* October 1968.

Ford Foundation **"to advance human welfare"**

Trustees

Alexander Heard, *Chairman of the Board*
Chancellor, Vanderbilt University, Nashville, Tennessee

McGeorge Bundy, *President*

William H. Donaldson
Chairman of the Board, Donaldson, Lufkin & Jenrette, New York, New York

James R. Ellis
Partner, Preston, Thorgrimson, Starin, Ellis & Holman, Seattle, Washington

Benson Ford
Vice President, Ford Motor Company, Dearborn, Michigan

Henry Ford II
Chairman of the Board, Ford Motor Company, Dearborn, Michigan

Kermit Gordon
President, Brookings Institution, Washington, D.C.

Walter A. Haas, Jr.
Chairman of the Board, Levi Strauss & Co., San Francisco, California

Vivian W. Henderson
President, Clark College, Atlanta, Georgia

Edwin H. Land
Chairman and President, Polaroid Corporation, Cambridge, Massachusetts

John H. Loudon
Chairman of the Board, Royal Dutch Petroleum Company, The Hague, The Netherlands

Robert S. McNamara
President, International Bank for Reconstruction and Development, Washington, D.C.

Dorothy N. Marshall
Dean of Faculty/Provost, University of Massachusetts, Boston, Massachusetts

J. Irwin Miller
Chairman of the Board, Cummins Engine Company, Columbus, Indiana

Patricia M. Wald
Attorney, Washington, D.C.

Charles E. Wyzanski, Jr.
Senior District Judge, United States District Court, Boston, Massachusetts

Executive Officers

McGeorge Bundy, *President*
David E. Bell, *Executive Vice President*
Harold Howe II, *Vice President*
Roger G. Kennedy, *Vice President*
W. McNeil Lowry, *Vice President*
Mitchell Sviridoff, *Vice President*
Arthur D. Trottenberg, *Vice President*
Howard R. Dressner, *Secretary and General Counsel*
Thomas H. Lenagh, *Treasurer*